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Assessment of Fluidized-Bed Combustion Solid Wastes for Land Disposal. Volume 8 Appendix J

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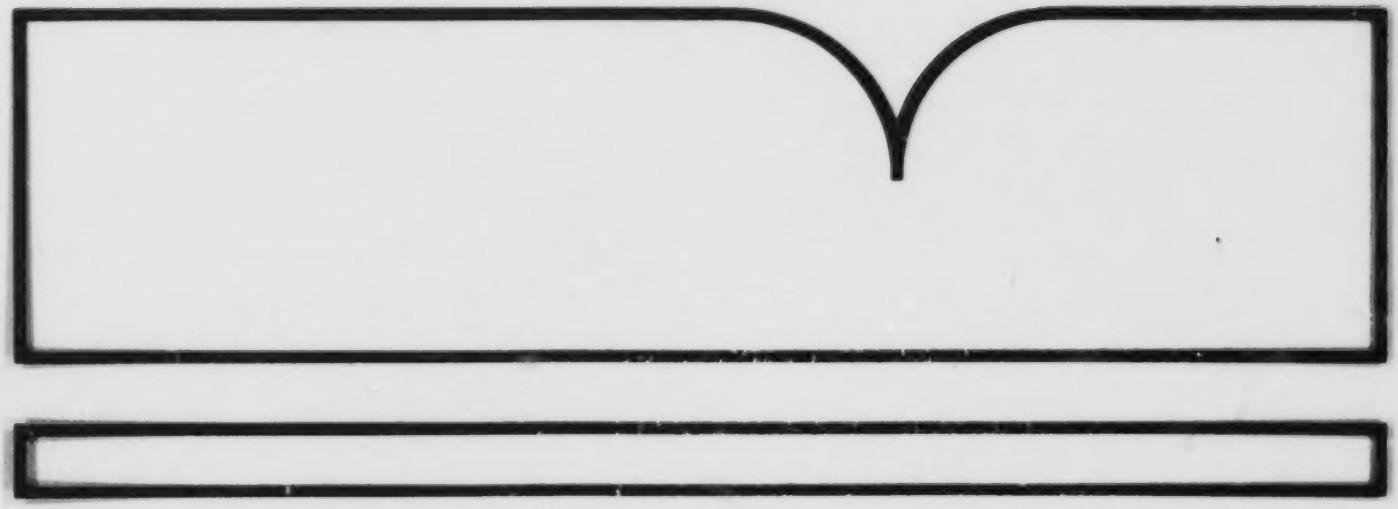

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ASSESSMENT OF FLUIDIZED-BED COMBUSTION SOLID WASTES FOR LAND DISPOSAL

Volume 8. Appendix J

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16. ABSTRACT The report, including 10 appendices, gives results of: (1) an analysis of representative samples of fluidized-bed combustion (FBC) wastes, (2) an assessment of the characteristics of leachates generated from the wastes under laboratory and field (landfill) conditions, (3) a characterization of the attenuation of the leachates by earth materials that are typical of disposal settings, (4) development of a way to predict the leachate generation behavior of FBC wastes under landfill conditions on the basis of laboratory test results by establishing a rigorous statistical relationship between the laboratory and field leaching results, and (5) assessment of the compatibility of commonly used landfill liner materials with FBC waste leachates. FBC is an emerging energy technology that holds promise for both high efficiency of energy conversion and minimization of adverse air quality impacts. A major advantage of FBC is that high-sulfur coal can be burned without the use of flue gas desulfurization equipment to meet air quality standards. The solid residues that are generated in an FBC unit are usually larger in volume and have different properties than the typical bottom ash from a conventional boiler.

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Abstract

The report, including 10 appendices, gives results of: (1) an analysis of representative samples of fluidized-bed combustion (FBC) wastes, (2) an assessment of the characteristics of leachates generated from the wastes under laboratory and field (landfill) conditions, (3) a characterization of the attenuation of the leachates by earth materials that are typical of disposal settings, (4) development of a way to predict the leachate generation behavior of FBC wastes under landfill conditions on the basis of laboratory test results by establishing a rigorous statistical relationship between the laboratory and field leaching results, and (5) assessment of the compatibility of commonly used landfill liner materials with FBC waste leachates. FBC is an emerging energy technology that holds promise for both high efficiency of energy conversion and minimization of adverse air quality impacts. A major advantage of FBC is that high-sulfur coal can be burned without the use of flue gas desulfurization equipment to meet air quality standards. The solid residues that are generated in an FBC unit are usually larger in volume and have different properties than the typical bottom ash from a conventional boiler.

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Appendix J

DATA LIST

FOR LEACHATE ANALYSES

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J.1 Overview

The principal data for the program were the concentration results from the analysis of leachate from the laboratory batch equilibration protocol, the laboratory columns, and the field cells. Most of the chemical analytical data were managed using automatic data processing equipment and the SAS software system. The data in this appendix are primarily from files of the SAS data management system.

J.1.1 SAS Data Management System

Because of its flexibility and wide variety of capabilities, SAS fulfilled all of the program's software needs. Data base management capabilities which were utilized included: 1) setup of new data files in disk storage; 2) access to existing data files; 3) addition of new observations to existing data sets; and 4) merging of different data sets on the basis of common variables. The SAS systems also includes a variety of statistical analysis capabilities that were used in the project (see Appendices D and E).

J.1.1.1 Laboratory Batch Equilibration Test Data Base

The chemistry data from the batch equilibration studies were received in sets separately from three sources--inductively coupled argon plasma emission spectrometry (ICAPES) elemental analyses, atomic absorption spectrophotometry (AAS) elemental analyses, and all other chemical analyses. The chemistry data were stored with necessary codes so that different chemical analyses from the same equilibration test could be merged. This code is described in detail below.

Each time a set of data was received (for example, a set of ICAPES analyses for batch equilibration tests), it was stored on the computer with the necessary identifying information so that it could later be combined with other types of information for the same batch equilibration tests. Thus, it was not necessary to wait until the data for a batch equilibration test were complete to edit or begin to analyze the data which were available.

J.1.1.2 Field Cell and Laboratory Column Data Base

For the field cells, data were received separately for ICAPES elemental analyses, AAS elemental analyses, other chemical analyses, flow-through volume, and rainfall. Each time a set of data was received, it was stored along with the codes for the field cells, the sample collection point (upper or lower), and the date that the sample was collected.

The rainfall data, which were stored in a separate file on the computer, were recorded as depth in millimeters on each day. The volumes of leachate from the upper collection point, the lower collection point, and the bottom of the field cell were recorded each time a leachate sample for chemical analysis was collected from a field cell. These data were also stored in a separate file in the computer and were used to determine flow-through volumes for each field cell (see Appendix E). The same approach was used for the laboratory control columns, which received the same input of deionized water in the laboratory as the field cells received from precipitation in the field. The volumes for the laboratory columns and field cells were sorted by date of collection and by field cell or laboratory column code.

J.1.2 Data Management Hardware

The computer hardware for the data processing consisted of two tandem-linked IBM computers (models 3030 and 3031) equipped with direct-access storage devices (3350 disks) and multiple-density tape drives. The equipment is physically located in Philadelphia, PA. Access was accomplished

either by high-speed synchronous remote job entry (for batch processing) or by terminal interaction using the time-sharing option.

J.1.3 Sample Coding Scheme

Because of the large number of samples that were generated in the laboratory protocol and related studies, a convenient, descriptive symbolism was developed to code the samples. For the laboratory protocol data, each sample was given a code of at least seven characters which indicates sample type (waste, leachate, or disposal medium), step in protocol, leaching time, number of repetitions of step, identification of waste, identification of disposal medium, and sample duplication. For the field cells, an elaborate sample code was not needed; all data were entered according to the day of analysis and by chemical parameter for the upper and lower sample points.

J.1.4 Data Formats

The separate SAS files may be thought of as two-dimensional arrays. Each row is indexed with one or more identification variables. These identification variables are usually characters, except for dates; (e.g., sample code for the shake test data or column numbers and month, day, and year for the field cell data). The columns then are the analytical measurements or observations.

Some of the components (e.g., the shake-test data) are presented in a form similar to the way they are stored in the computer, while other formats show transformed variables (such as the two rainfall records, which show rain in liters converted from millimeters).

J.1.5 Data Receipt and Entry

Generally, the data were received from the various labs or field personnel in tabular form on pre-designed coding sheets. The data were keypunched and key-verified and read onto a temporary SAS disk file. After review by the appropriate project personnel, the data were corrected if

necessary, and the temporary file was added to the main body of the data for that component via the SAS update procedure.

As noted, the following categories of data were acquired for the shake-test component:

- ICAPES elemental analysis;
- AAS elemental analysis; and
- Wet chemistry analyses.

For the field cells, the following information was received:

- ICAPES elemental analysis;
- AAS elemental analysis;
- Wet chemistry analysis;
- Total flow-through volume; and
- Rainfall.

The lab columns included data from the following sources:

- ICAPES elemental analysis;
- Wet chemistry; and
- Volumes in and out.

J.1.6 Special Data Files

Special or accessory files such as the rainfall records, were maintained and presented separately. Special studies data, including repetitive leaching of two media and assessment of Step 1 reproducibility, though similar in concept and coding format to the shake-test data, were maintained and presented separately. Other data sets, including the leaching of attenuation media and RCRA analysis were actually stored with the shake-test data but are presented separately for emphasis.

J.1.7 Units and Precision of Measurement

All analytical values reported are in milligrams per liter (mg/L) except conductivity micromhos/cm and pH unless otherwise noted. Volumes are reported in liters. All figures are rounded to two significant digits. Except where specifically noted, missing values were stored and displayed as a period (.).

J.1.8 Data Gaps

Examination of the data list shows that not all leaching schedules were carried out, or in other cases, not all chemical determinations for a sample were made. For example, the Huntington FGD waste was discontinued at mid-project. One of the disposal media media (Greer limestone) was discontinued because it was replaced by the Greenbrier limestone. Analysis for the one- and two-day leachings was discontinued early for almost all waste-media combinations if the leachate analysis showed no dramatic differences from the seven-day leachings.

J.2 Batch Equilibration Extractions of Wastes: Protocol Steps 1, 2, and 3

As noted in Appendix D, Steps 1, 2, and 3 of the laboratory batch equilibration protocol involved repeated leaching of the FBC waste. Step 1 is the initial leaching of the waste with deionized water. Step 2 consists of repeated leaching of the same sample of waste with fresh deionized water. Step 3 involves repeated exposure of Step 1 leachate to fresh samples of waste. Four wastes (three FBC wastes and one waste from the Huntington power plant) were subjected to extraction in protocol Steps 1, 2, and 3.

Table J-1 depicts the total extraction matrix for the four wastes. Full seven-day extraction protocols were conducted on the Exxon PFBC and Alliance AFBC wastes. Steps 1 and 2 were conducted on the Georgetown AFBC

TABLE J-1. SUMMARY OF LABORATORY PROTOCOL EXTRACTIONS PERFORMED ON THE FOUR WASTES

Step - Repetition	Number of Samples For Each Waste for Each Extraction Step											
	Exxon PFBC			Alliance AFBC			Georgetown AFBC			Huntington FGD		
	1 day	2 day	7 day	1 day	2 day	7 day	1 day	2 day	7 day	1 day	2 day	7 day
Step 1	6	6	8	6	6	36			6	6	6	12
Step 2-1	2		2									
2-2	2		2			2			4[1]			
2-3			2			2			4[1]			
2-4			2			2			4[1]			
2-5			2			2			4[1]			
2-6			2			2			4[1]			
2-7						2			4[1]			
2-8						2			4[1]			
2-9						2			4[1]			
Step 3-1	2		2									
3-2			2			2						
3-3						2						
3-4						2						
3-5						2						

[1]Includes unground sample extracts.

waste. The Huntington FGD waste was subjected to Step 1 extraction. One-day and two-day extractions were performed on the Exxon PFBC and Alliance AFBC wastes.

The sample code number consists of a seven-character symbol which is concatenated as A, b, c, d, e, f, g. These characters are defined as follows:

A The first character of the code is a letter identification of the sample type, as follows:

- S Denotes a solid FBC waste.
- A Denotes a solid disposal medium.
- L Denotes a liquid phase (leachate) from a laboratory extraction step involving leaching and/or attenuation. All samples described in this section of the appendix are leachates.

b Identifies the specific step in the protocol (b = 1 through 7),

c Denotes the time period for a particular extraction (c = 1, 2, or 7 for 1 day, 2 days, or 7 days of extraction, respectively),

d Denotes the number of times a secondary leaching or attenuation step has been repeated. (d = 0 through 9; 0 is used in the Steps 1 and 4 which are not repeated.)

e Is a number identifying the FBC waste residues, as follows:
e = 1 Exxon PFBC waste
e = 2 Huntington FGD waste
e = 3 Alliance AFBC waste
e = 4 Georgetown AFBC waste

f Is a number reserved for the disposal media when it is used in Steps 4, 5, and 6 of the protocol. For protocol Steps 1, 2, and 3 in this section of the appendix, f = 00.

g Denotes multiple extractions. All extractions were performed in at least duplicate (A and B). If more than two extractions were performed, the additional samples generated were assigned additional letters (C, D, E, etc.) in the order of sample generation. Not all of the multiple extractions were performed at the same time (e.g., Step 1). For some leachate samples, the letters are preceded by an asterisk (*), which

denotes that a leachate sample was a composite of several leachates. The absence of an asterisk indicates an individually generated leachate.

For example,

L170300*C Denotes a leachate sample from Step 1 in the protocol. The sample was split from a composite carried forward to Step 3, 4, or 5. The individual leachates comprising the composite were seven day leachates generated by contacting AFBC waste with deionized water. No repetition of the step was performed.

There generally were two replicate sample analyses, which have been coded as 'A' and 'B'. In some cases, especially where a greater amount of leachate was needed for subsequent steps, a third and fourth replicate may have been made, which are usually labelled 'C' and 'D'. There were some cases (note especially waste 03 protocol Step 1) where many more replicates were performed; they are coded with successive alphabetic letters.

J.2.1 Order of Presentation of the Samples

For seven-day leachates, the results of waste 01 (Exxon PFBC) protocol Steps 1, 2, and 3 are first presented, followed by the same set of steps for waste 03 (Alliance AFBC), waste 04 (Georgetown AFBC), and the smaller set of data for waste 02 (Huntington FGD). Included at the end are the abbreviated two- and one-day leachings for wastes 01 and 03.

J.2.2 Order of Presentation of the Analytical Determinations

There were 35 analytical parameters recorded (23 by ICAPES, four by AAS, and eight other determinations returned from the "water lab"). For ease of reference and interpretation, the first seven parameters are shown for the entire sample set, followed by the second set of seven parameters, and so forth. The order of presentation is summarized as follows:

a. First sequence - Al, As, B, Ba, Be, Ca, Cd

b. Second sequence - Co, Cr, Cu, Cl, Fe, Fl, Sp.Cond.

c. Third sequence - Hg, K, Li, Mg, Mn, Mo, Na

d. Fourth sequence - Ni, Pb, pH, Se, Si, SO_4, Sr

e. Fifth sequence - TDS, Ti, TIC, TOC, U, V, Zn.

J.2.3 Detection Limits, Accuracy, and Units

Although presented here as numbers preceded with a less-than sign (<), detection limit values were actually stored in the computer as negative numbers since different functional values were substituted for the detection limits depending upon the type of calculation performed. The data entries may be accurate to two significant figures. All parameters reported here are in milligrams per liter (mg/L) except for specific conductance (micromhos/cm) and pH. Missing values are recorded as a period(.).

	AL	AS	B	BA	BE	CA	CD
L 170100*A	0.73	<0.08	14.	0.18	.	1900.	<0.005
L 170100*B	0.87	<0.08	14.	0.15	.	1800.	<0.005
L 170100A	0.45	<0.08	15.	0.12	.	1300.	<0.005
L 170100B	0.37	<0.08	14.	0.16	.	1700.	<0.005
L 170100C	0.29	<0.08	11.	0.18	.	1700.	<0.005
L 170100D	0.97	<0.08	11.	0.16	.	1600.	<0.005
L 170100E	0.66	<0.08	15.	0.21	.	1900.	<0.005
L 170100F	0.71	<0.08	12.	0.14	.	1500.	<0.005
L 170100W	1.2	.	5.1	0.24	.	.	<0.005
L 170100X	1.0	.	5.2	0.30	.	.	<0.005
L 170100Y	1.4	.	4.9	0.24	.	.	<0.005
L 170100Z	0.91	.	5.2	0.28	.	.	<0.005
L 271100A	0.33	<0.08	9.6	0.14	.	1500.	<0.005
L 271100B	0.99	<0.08	7.5	0.092	.	1000.	<0.005
L 272100A	0.45	<0.08	17.	0.11	.	1600.	<0.005
L 272100B	0.47	<0.08	18.	0.12	.	1600.	<0.005
L 273100A	.	.	.	.	.	.	.
L 273100B	0.86	<0.08	6.5	0.082	.	890.	<0.005
L 274100A	0.69	<0.08	3.0	0.073	.	610.	<0.005
L 274100B	1.2	<0.08	2.9	0.073	.	640.	<0.005
L 275100A	1.0	<0.08	2.2	0.050	.	600.	<0.005
L 275100B	1.4	<0.08	1.9	0.047	.	510.	<0.005
L 276100A	1.4	<0.08	1.6	0.044	.	510.	<0.005
L 276100B	0.98	.	1.6	0.057	.	560.	<0.005
L 277100A	2.0	<0.08	1.7	0.047	.	610.	<0.005
L 277100B	2.4	<0.08	1.4	0.048	.	589.	<0.005
L 371100A	0.49	<0.08	23.	0.34	.	1800.	<0.005
L 371100B	0.50	<0.08	23.	0.30	.	1800.	<0.005
L 372100A	0.40	<0.08	27.	0.28	.	1600.	<0.005
L 372100B	0.33	<0.08	28.	0.28	.	1700.	<0.005
L 170300*A	0.45	.	0.92	0.23	0.0010	.	0.010
L 170300*AA	1.4	.	4.1	0.11	0.0090	1100.	0.052
L 170300*B	0.40	.	0.86	0.25	0.0010	1300.	<0.009
L 170300*BB	0.48	.	1.0	0.13	0.0020	1100.	0.012
L 170300*C	0.44	.	2.1	0.041	0.0050	.	0.033
L 170300*CC	0.61	.	1.4	0.14	0.0030	1100.	0.016
L 170300*D	<0.05	.	0.72	<0.001	0.0020	1400.	0.012
L 170300*E	0.35	.	1.6	0.061	0.0030	1400.	0.025
L 170300*F	0.52	.	1.4	0.054	0.0030	1400.	0.023
L 170300*H	1.2	.	5.2	0.066	0.0090	1200.	0.058
L 170300*I	1.6	.	6.8	0.090	0.011	1300.	0.072
L 170300*J	1.0	.	4.5	0.11	0.0070	2800.	0.047
L 170300*K	1.5	.	6.5	0.081	0.011	1200.	0.072
L 170300*L	1.3	.	6.3	0.056	0.011	1200.	0.063
L 170300*M	1.3	.	6.1	0.072	0.010	2500.	0.067

	AE	AS	B	BA	BE	CA	CD
L 170300+N	1.2	•	5.1	0.079	0.0080	1200.	
L 170300+O	0.93	•	3.6	0.10	0.0050	2000.	0.057
L 270300+P	1.5	•	4.6	0.13	•	1300.	0.041
L 170300+Q	2.1	•	6.4	0.071	•	950.	0.052
L 170300+R	1.8	•	5.6	0.11	•	1000.	0.078
L 270300+S	2.6	•	7.9	0.093	•	980.	0.066
L 170300+T	1.1	•	3.3	0.13	•	1200.	0.093
L 270300+U	1.7	•	5.2	0.12	•	1100.	0.036
L 170300+V	2.2	•	6.9	0.099	•	980.	0.059
L 170300+W	2.6	•	8.0	0.056	•	980.	0.081
L 170300+X	1.1	•	3.3	0.12	0.0070	1100.	0.099
L 170300+Y	1.0	•	2.9	0.13	0.0060	1100.	0.041
L 170300+Z	1.1	•	3.4	0.11	0.0080	1100.	0.037
L 170300A	0.37	•	0.95	0.24	0.0010	1300.	0.044
L 170300B	0.49	•	1.5	0.24	0.0020	1500.	0.011
L 170300C	0.58	•	1.8	0.22	0.0030	1500.	0.019
L 170300D	0.41	•	1.1	0.24	0.0020	1500.	0.026
L 170300E	0.48	•	1.6	0.22	0.0020	1500.	0.014
L 170300F	0.48	•	1.4	0.23	0.0020	1500.	0.020
L 170300H	0.54	•	1.8	0.21	0.0030	•	0.020
L 170300I	0.54	•	1.8	0.20	0.0030	•	0.022
							0.024
L 271300A	0.24	•	1.2	0.019	0.0020	1400.	
L 271300B	0.30	•	1.5	0.016	0.0030	1400.	0.018
L 272300A	0.21	•	0.54	0.081	<0.0005	1400.	0.023
L 272300B	0.096	•	0.56	<0.001	<0.0005	1500.	<0.008
L 273300A	0.97	•	4.1	0.037	0.0060	2000.	<0.008
L 273300B	0.93	•	4.1	0.041	0.0060	1800.	0.046
L 274300A	1.4	•	6.0	0.029	0.010	1300.	0.043
L 274300B	1.5	•	7.1	<0.001	0.012	1300.	0.064
L 275300A	1.2	•	5.3	0.018	0.0080	1300.	0.079
L 275300B	1.3	•	5.6	0.027	0.0090	1200.	0.059
L 276300A	1.4	•	5.8	0.037	0.0090	2300.	0.060
L 276300B	1.9	•	8.7	<0.001	0.015	2400.	0.060
L 277300A	1.2	•	3.7	0.056	•	1200.	0.098
L 277300B	1.3	•	4.2	0.033	•	1100.	0.041
L 278300A	1.5	•	4.8	0.050	•	1200.	0.048
L 278300B	1.8	•	5.5	0.042	•	1000.	0.052
L 279300A	2.2	•	6.9	0.042	•	1000.	0.063
L 279300B	2.4	•	7.4	0.040	•	970.	0.082
							0.087
L 871300A	0.36	•	1.7	0.088	0.0030	1500.	
L 871300B	0.43	•	2.1	0.064	0.0040	1400.	0.025
L 372300A	<0.05	•	0.46	0.061	<0.0005	1400.	0.031
L 372300B	0.28	•	0.79	0.14	0.0010	1400.	<0.008
L 373300A	0.93	•	4.2	0.13	0.0070	2100.	<0.008
L 373300B	1.1	•	4.7	0.17	0.0070	1600.	0.044
L 374300A	1.1	•	4.4	0.16	0.0070	1500.	0.050
							0.048

	AL	AS	B	BA	BE	CA	CD
L 374300B	1.1	.	4.6	0.12	0.0070	1600.	0.049
L 375300A	1.3	.	5.7	0.14	0.0090	2000.	0.063
L 375300B	1.3	.	5.7	0.11	0.010	1100.	0.064
L 376300A	0.97	.	4.3	0.17	0.0070	1800.	0.044
L 376300B	1.4	.	6.1	0.12	0.010	1200.	0.067
L 170400+A	<0.25	.	<0.04	0.19	<0.002	1500.	<0.04
L 170400+B	<0.25	.	<0.04	0.19	<0.002	1400.	<0.04
L 170400A	<0.25	.	<0.04	0.20	<0.002	1600.	<0.04
L 170400B	<0.25	.	0.088	0.19	0.0030	1600.	<0.04
L 170400C	0.42	.	0.40	0.19	0.0030	1500.	<0.04
L 170400D	<0.25	.	0.44	0.28	<0.002	1400.	<0.04
L 271400A	<0.25	.	<0.04	0.15	<0.002	1300.	<0.04
L 271400B	<0.25	.	<0.04	0.17	0.0030	1300.	<0.04
L 271400C	<0.25	.	<0.04	0.21	<0.002	1300.	<0.04
L 271400D	<0.25	.	<0.04	0.16	<0.002	1300.	<0.04
L 272400A	<0.25	.	2.4	0.12	<0.002	1400.	<0.04
L 272400B	<0.25	.	1.1	0.14	<0.002	1300.	<0.04
L 272400C	<0.25	.	0.80	0.15	<0.002	1300.	<0.04
L 272400D	<0.25	.	0.85	0.097	<0.002	1500.	<0.04
L 273400A	<0.25	.	<0.04	2.8	<0.002	.	<0.04
L 273400B	<0.25	.	<0.04	2.8	<0.002	900.	<0.04
L 273400C	<0.25	.	<0.04	1.9	<0.002	880.	<0.04
L 273400D	<0.25	.	<0.04	1.1	<0.002	1100.	<0.04
L 274400A	<0.25	.	<0.04	2.0	<0.002	820.	<0.04
L 274400B	<0.25	.	<0.04	2.0	<0.002	830.	<0.04
L 274400C	<0.25	.	<0.04	2.3	<0.002	870.	<0.04
L 274400D	<0.25	.	<0.04	2.7	<0.002	850.	<0.04
L 275400A	<0.25	.	<0.04	1.2	<0.002	770.	<0.04
L 275400B	<0.25	.	<0.04	1.3	<0.002	810.	<0.04
L 275400C	<0.25	.	<0.04	1.4	<0.002	810.	0.084
L 275400D	<0.25	.	<0.04	1.8	<0.002	820.	0.093
L 276400A	<0.25	.	<0.04	0.97	<0.002	790.	<0.04
L 276400B	<0.25	.	<0.04	1.0	<0.002	800.	<0.04
L 276400C	<0.25	.	<0.04	1.0	<0.002	810.	<0.04
L 276400D	<0.25	.	<0.04	1.3	<0.002	850.	<0.04
L 277400A	<0.25	.	<0.04	0.79	<0.002	830.	<0.04
L 277400B	<0.25	.	<0.04	0.85	<0.002	800.	<0.04
L 277400C	<0.25	.	<0.04	0.92	<0.002	810.	<0.04
L 277400D	<0.25	.	<0.04	1.0	<0.002	850.	0.11
L 278400A	<0.25	.	<0.04	0.69	<0.002	800.	0.14
L 278400B	<0.25	.	<0.04	0.71	<0.002	810.	0.13
L 278400C	0.43	.	0.15	0.82	0.0030	820.	0.11
L 278400D	<0.25	.	<0.04	0.82	<0.002	840.	0.054
L 279400A	0.68	.	0.85	1.0	<0.002	800.	<0.04
L 279400B	0.62	.	1.2	1.2	<0.002	840.	<0.04
L 279400C	0.45	.	0.55	0.94	<0.002	790.	<0.04

	AL	AS	B	BA	BE	CA	CD
L 279400D	0.63	•	0.76	1.1	<0.002	860.	<0.04
L 170200A	4.3	•	27.	0.31	•	1500.	<0.005
L 170200B	1.6	•	25.	0.70	•	1400.	<0.005
L 170200C	1.4	•	27.	0.81	•	1500.	<0.005
L 170200D	3.3	•	27.	0.33	•	1400.	<0.005
L 170200E	6.0	•	29.	0.32	•	1500.	<0.005
L 170200F	1.1	•	27.	0.54	•	1500.	<0.005
L 170200G	4.7	•	28.	0.34	•	1500.	<0.005
L 170200H	6.5	•	26.	0.37	•	1400.	<0.005
L 170200I	1.5	•	27.	0.46	•	1500.	<0.005
L 170200J	4.6	•	30.	0.35	•	1600.	<0.005
L 170200K	2.9	•	29.	0.35	•	1500.	<0.005
L 170200L	2.8	•	29.	0.30	•	1600.	<0.005
L 120100A	0.75	<0.08	13.	0.26	•	340.	<0.005
L 120100B	1.1	<0.08	12.	0.28	•	1800.	<0.005
L 120100C	0.65	<0.08	12.	0.28	•	1200.	<0.005
L 120100D	•	•	•	•	•	•	•
L 120100E	0.60	<0.08	12.	0.31	•	1200.	<0.005
L 120100F	0.48	•	14.	0.23	•	0.29	<0.005
L 120300A	0.70	•	2.3	0.22	0.0040	•	0.033
L 120300B	0.76	•	2.8	0.22	0.0050	•	0.039
L 120300C	0.72	•	2.5	0.22	0.0040	•	0.035
L 120300D	0.63	•	2.2	0.21	0.0040	•	0.033
L 120300E	0.71	•	2.5	0.22	0.0040	•	0.034
L 120300F	0.69	•	2.4	0.22	0.0040	•	0.032
L 110100A	0.39	<0.08	8.0	0.28	•	1600.	<0.005
L 110100B	0.49	<0.08	8.3	0.26	•	1500.	<0.005
L 110100C	0.50	<0.08	7.6	0.18	•	1600.	<0.005
L 110100D	1.3	<0.08	8.6	0.13	•	820.	<0.005
L 110100E	1.4	<0.08	7.9	0.12	•	1600.	<0.005
L 110100F	1.7	<0.08	8.1	0.13	•	1600.	<0.005
L 211100A	0.64	<0.08	5.6	0.19	•	1900.	<0.005
L 211100B	0.52	<0.08	6.1	0.25	•	1900.	<0.005
L 212100A	0.31	<0.08	14.	0.11	•	1100.	<0.005
L 212100B	0.30	<0.08	15.	0.11	•	1200.	<0.005
L 311100A	0.58	<0.08	22.	0.16	✓	1900.	<0.005
L 311100B	0.71	<0.08	22.	0.16	✓	810.	<0.005
L 110300A	0.46	•	2.1	0.16	0.0040	•	0.032

	AL	AS	B	BA	BE	CA	CD
L 110300B	0.57	.	2.0	0.22	0.0030	.	0.026
L 110300C	0.68	.	2.4	0.23	0.0040	.	0.032
L 110300D	0.91	.	3.2	0.21	0.0050	.	0.043
L 110300E	0.62	.	2.3	0.21	0.0040	.	0.030
L 110300F	0.82	.	3.1	0.21	0.0050	.	0.040

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 170100*A	<0.15	9500.	<0.005	<0.005	6.9	0.24	0.80
L 170100*B	<0.15	9500.	0.13	<0.005	9.3	0.28	0.85
L 170100A	<0.15	9500.	0.20	<0.005	7.4	0.19	0.82
L 170100B	<0.15	9500.	0.054	<0.005	2.5	0.16	0.74
L 170100C	<0.15	9500.	<0.005	<0.005	2.6	0.10	0.91
L 170100D	<0.15	9700.	0.029	<0.005	2.6	0.39	0.77
L 170100E	<0.15	9500.	0.079	<0.005	2.0	0.21	0.72
L 170100F	<0.15	9500.	0.054	<0.005	2.4	0.25	0.67
L 170100W	1.7	8600.	0.14	0.065	•	0.15	1.0
L 170100X	1.4	2100.	0.12	0.043	•	0.072	1.2
L 170100Y	2.2	2200.	0.16	0.090	•	0.11	1.9
L 170100Z	1.2	8500.	0.12	0.033	•	0.088	1.2
L 271100A	<0.15	6000.	0.032	<0.005	1.0	0.12	0.37
L 271100B	<0.15	6000.	0.22	<0.005	1.5	0.41	0.19
L 272100A	<0.15	4600.	0.065	<0.005	2.1	0.17	0.53
L 272100B	<0.15	4600.	0.051	<0.005	1.8	0.20	•
L 273100A	•	4200.	•	•	<1.0	•	0.44
L 273100B	<0.15	4100.	<0.005	<0.005	<1.0	0.12	0.44
L 274100A	<0.15	3400.	<0.005	<0.005	<1.0	0.045	0.49
L 274100B	<0.15	3300.	<0.005	<0.005	<1.0	0.060	0.49
L 275100A	<0.15	2500.	<0.005	<0.005	•	0.063	0.26
L 275100B	<0.15	2700.	<0.005	<0.005	•	0.12	0.25
L 276100A	<0.15	2700.	<0.005	<0.005	2.5	0.071	0.44
L 276100B	<0.15	2700.	<0.005	<0.005	2.5	0.043	0.37
L 277100A	<0.15	2100.	<0.005	<0.005	•	0.12	0.21
L 277100B	<0.15	2100.	<0.005	<0.005	•	0.13	0.59
L 371100A	<0.15	9000.	0.088	0.080	•	0.22	3.7
L 371100B	<0.15	9000.	0.31	<0.005	15.	0.18	0.77
L 372100A	<0.15	9500.	0.30	<0.005	22.	0.17	0.75
L 372100B	<0.15	9500.	0.33	<0.005	23.	0.14	0.80
L 170300*A	0.015	8400.	0.041	0.026	53.	0.056	0.27
L 170300*AA	0.11	8500.	0.16	0.19	51.	0.093	0.29
L 170300*B	0.015	8500.	0.039	0.022	53.	0.043	0.31
L 170300*BB	0.023	8200.	0.053	0.050	51.	0.17	0.23
L 170300*C	0.062	8300.	0.089	0.066	53.	0.041	0.18
L 170300*CC	0.035	3300.	0.064	0.063	51.	0.18	0.27
L 170300*D	0.029	8700.	0.048	0.031	53.	0.010	0.15
L 170300*E	0.042	8200.	0.070	0.053	47.	0.040	0.10
L 170300*F	0.040	8200.	0.065	0.048	48.	0.17	0.17
L 170300*H	0.10	8200.	0.16	0.17	53.	0.077	0.29
L 170300*I	0.13	8000.	0.20	0.21	54.	0.10	0.25
L 170300*J	0.085	8200.	0.13	0.14	49.	0.074	0.14
L 170300*K	0.13	8000.	0.19	0.20	54.	0.093	0.24
L 170300*L	0.13	8000.	0.19	0.19	48.	0.089	0.25
L 170300*M	0.12	8100.	0.18	0.19	47.	0.085	0.25

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 170300+N	0.10	8000.	0.15	0.16	45.	0.088	0.17
L 170300+O	0.072	8100.	0.11	0.12	45.	0.10	0.20
L 170300+P	0.098	7800.	0.15	0.22	51.	0.088	0.19
L 170300+Q	0.14	7800.	0.21	0.30	53.	0.13	0.19
L 170300+R	0.13	8300.	0.18	0.26	49.	0.10	0.24
L 170300+S	0.18	8300.	0.26	0.36	48.	0.13	0.17
L 170300+T	0.068	8300.	0.11	0.16	46.	0.083	0.24
L 170300+U	0.12	8300.	0.17	0.25	45.	0.11	0.22
L 170300+V	0.15	8300.	0.22	0.32	43.	0.12	0.25
L 170300+W	0.18	8200.	0.26	0.37	44.	0.13	0.26
L 170300+X	0.088	8500.	0.13	0.15	61.	0.081	0.16
L 170300+Y	0.074	8600.	0.12	0.13	62.	0.076	0.28
L 170300+Z	0.085	8200.	0.13	0.15	51.	0.074	0.24
L 170300A	0.018	8200.	0.043	0.024	52.	0.020	0.30
L 170300B	0.038	8300.	0.060	0.048	54.	0.030	0.33
L 170300C	0.040	8200.	0.071	0.051	53.	0.037	0.44
L 170300D	0.022	8100.	0.047	0.030	53.	0.027	0.41
L 170300E	0.032	8400.	0.063	0.045	53.	0.032	0.39
L 170300F	0.027	8300.	0.058	0.038	53.	0.035	0.33
L 170300H	0.036	6700.	0.070	0.051	52.	0.042	0.38
L 170300I	0.039	8400.	0.072	0.054	51.	0.035	0.34
L 271300A	0.032	8400.	0.057	0.038	12.	0.029	0.26
L 271300B	0.045	8500.	0.067	0.047	12.	0.031	0.23
L 272300A	0.0090	8100.	0.025	0.025	6.9	<0.008	0.15
L 272300B	0.018	8000.	0.030	0.028	6.9	<0.008	0.18
L 273300A	0.081	7900.	0.13	0.13	<2.0	0.17	0.28
L 273300B	0.077	7900.	0.13	0.13	<2.0	0.093	0.21
L 274300A	0.12	8100.	0.18	0.18	<2.0	0.093	0.14
L 274300B	0.14	8000.	0.22	0.23	<2.0	0.088	0.17
L 275300A	0.10	8000.	0.16	0.17	<2.0	0.075	0.16
L 275300B	0.11	8000.	0.17	0.18	<2.0	0.076	0.16
L 276300A	0.12	8100.	0.18	0.18	<2.0	0.082	0.10
L 276300B	0.18	8300.	0.26	0.27	<2.0	0.11	0.080
L 277300A	0.079	7500.	0.13	0.17	<2.0	0.088	0.14
L 277300B	0.093	7400.	0.15	0.20	<2.0	0.099	0.17
L 278300A	0.10	8300.	0.16	0.22	<2.0	0.081	0.15
L 278300B	0.12	8200.	0.18	0.25	<2.0	0.087	0.12
L 279300A	0.15	8000.	0.23	0.32	<2.0	0.11	0.15
L 279300B	0.16	8100.	0.24	0.34	<2.0	0.12	0.15
L 871300A	0.047	8900.	0.073	0.054	110.	0.027	0.33
L 871300B	0.059	8800.	0.087	0.067	98.	0.038	0.35
L 872300A	0.014	8800.	0.10	0.024	150.	0.051	0.14
L 872300B	0.028	8800.	0.11	0.030	150.	0.081	0.070
L 873300A	0.081	9000.	0.22	0.13	210.	0.057	0.27
L 873300B	0.092	9000.	0.24	0.14	210.	0.067	0.26
L 874300A	0.083	9400.	0.24	0.14	250.	0.092	0.22

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 374300B	0.090	9300.	0.25	0.15	250.	0.072	0.33
L 375300A	0.11	9500.	0.28	0.18	300.	0.085	0.19
L 375300B	0.12	9600.	0.27	0.17	300.	0.079	0.21
L 376300A	0.084	10000.	0.25	0.15	310.	0.073	0.16
L 376300B	0.12	10000.	0.29	0.19	330.	0.098	0.16
L 370400-A	<0.03	7700.	<0.005	<0.005	23.	<0.04	0.11
L 370400-B	<0.03	7500.	<0.005	<0.005	24.	<0.04	0.15
L 370400A	<0.03	7700.	0.026	<0.005	23.	<0.04	0.11
L 370400B	<0.03	7500.	0.067	<0.005	24.	<0.04	0.15
L 370400C	<0.03	8300.	0.10	0.076	25.	<0.04	0.25
L 370400D	<0.03	8000.	0.10	0.084	23.	<0.04	0.19
L 271400A	<0.03	8000.	0.020	<0.005	3.2	<0.04	0.090
L 271400B	<0.03	8100.	0.067	<0.005	5.3	<0.04	0.070
L 271400C	<0.03	8100.	0.065	0.011	6.0	<0.04	0.060
L 271400D	<0.03	8300.	0.064	<0.005	5.7	<0.04	<0.05
L 272400A	<0.03	8300.	<0.005	<0.005	<2.0	<0.04	0.050
L 272400B	<0.03	8300.	0.015	<0.005	<2.0	<0.04	0.070
L 272400C	<0.03	8200.	<0.005	0.011	<2.0	<0.04	0.060
L 272400D	<0.03	8400.	0.0070	<0.005	<2.0	<0.04	0.080
L 273400A	<0.03	7200.	<0.005	<0.005	<2.0	<0.04	0.090
L 273400B	<0.03	7200.	<0.005	<0.005	<2.0	0.070	0.11
L 273400C	<0.03	7300.	<0.005	<0.005	<2.0	<0.04	0.13
L 273400D	<0.03	7400.	<0.005	<0.005	<2.0	<0.04	0.10
L 274400A	<0.03	7000.	<0.005	0.0050	<2.0	<0.03	0.10
L 274400B	<0.03	6800.	<0.005	<0.005	<2.0	<0.03	0.13
L 274400C	<0.03	7000.	<0.005	<0.005	<2.0	<0.03	0.14
L 274400D	<0.03	7100.	<0.005	<0.005	<2.0	<0.03	0.090
L 275400A	<0.03	6800.	<0.005	<0.005	<2.0	<0.03	<0.05
L 275400B	<0.03	6900.	<0.005	<0.005	<2.0	<0.03	0.070
L 275400C	<0.03	6800.	<0.005	<0.005	<2.0	<0.03	<0.05
L 275400D	<0.03	7000.	0.014	<0.005	<2.0	<0.03	0.070
L 276400A	<0.03	6600.	*	<0.005	<2.0	<0.03	0.070
L 276400B	<0.03	6600.	<0.005	<0.005	<2.0	<0.03	0.080
L 276400C	<0.03	7000.	0.010	<0.005	<2.0	<0.03	0.070
L 276400D	<0.03	7000.	*	<0.005	<2.0	<0.03	0.080
L 277400A	<0.03	6700.	<0.005	<0.005	<2.0	<0.03	0.070
L 277400B	<0.03	7000.	<0.005	<0.005	<2.0	<0.03	0.070
L 277400C	<0.03	6700.	<0.005	<0.005	<2.0	<0.03	0.060
L 277400D	<0.03	7100.	<0.005	<0.005	<2.0	<0.03	0.060
L 278400A	<0.03	6900.	0.061	0.078	<2.0	<0.03	0.080
L 278400B	<0.03	7000.	<0.005	<0.005	<2.0	<0.03	0.070
L 278400C	<0.03	6900.	0.068	0.094	<2.0	<0.03	0.050
L 278400D	<0.03	7000.	<0.005	<0.005	<2.0	<0.03	0.080
L 279400A	<0.03	7000.	<0.005	<0.005	<2.0	<0.04	0.090
L 279400B	<0.03	7200.	<0.005	<0.005	<2.0	<0.04	0.10
L 279400C	<0.03	7100.	<0.005	<0.005	<2.0	<0.04	0.13

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 2394000	<0.03	7000.	<0.005	<0.005	<2.0	<0.04	0.14
L 170200A	2.1	7000.	1.3	0.12	•	0.43	3.3
L 170200B	2.8	7100.	1.1	0.16	•	0.14	3.0
L 170200C	2.3	6800.	1.0	0.12	•	0.12	3.0
L 170200D	2.2	8000.	1.3	0.14	•	0.31	3.8
L 170200E	2.2	5700.	1.3	0.13	•	0.63	2.4
L 170200F	1.8	7500.	1.1	0.097	•	0.17	3.0
L 170200G	2.4	8300.	1.3	0.14	•	0.45	3.7
L 170200H	2.9	7800.	1.3	0.18	•	0.71	3.9
L 170200I	2.6	7500.	1.0	0.14	•	0.11	2.8
L 170200J	2.2	7700.	1.4	0.13	•	0.53	3.1
L 170200K	2.2	6300.	1.3	0.13	•	0.34	2.1
L 170200L	1.8	7800.	1.3	0.10	•	0.29	3.3
L 120100A	<0.15	10000.	<0.005	<0.005	16.	0.23	1.1
L 120100B	<0.15	10000.	<0.005	<0.005	9.1	0.42	0.99
L 120100C	<0.15	10000.	<0.005	<0.005	7.8	0.22	0.92
L 120100D	•	10000.	•	•	6.7	•	0.91
L 120100E	<0.15	10000.	<0.005	<0.005	4.9	0.18	0.97
L 120100F	<0.15	98000.	<0.005	<0.005	7.2	0.20	0.91
L 120300A	0.051	9300.	0.095	0.063	51.	0.048	0.38
L 120300B	0.065	9400.	0.10	0.073	53.	0.045	0.33
L 120300C	0.058	9400.	0.098	0.067	55.	0.044	0.25
L 120300D	0.048	9400.	0.085	0.060	57.	0.050	0.34
L 120300E	0.057	9500.	0.11	0.070	52.	0.050	0.43
L 120300F	0.053	9400.	0.10	0.065	52.	0.046	0.44
L 110100A	<0.15	11000.	<0.005	<0.005	6.0	0.14	1.1
L 110100B	<0.15	11000.	<0.005	<0.005	•	0.16	1.1
L 110100C	<0.15	11000.	<0.005	<0.005	4.3	0.17	1.1
L 110100D	<0.15	11000.	<0.005	<0.005	5.7	0.48	1.1
L 110100E	<0.15	11000.	<0.005	<0.005	4.3	0.52	1.0
L 110100F	<0.15	11000.	<0.005	<0.005	4.3	0.60	1.1
L 211100A	<0.15	8300.	<0.005	<0.005	1.0	0.26	0.54
L 211100B	<0.15	8300.	<0.005	<0.005	•	0.22	0.32
L 212100A	<0.15	4000.	<0.005	<0.005	•	0.15	0.82
L 212100B	<0.15	3900.	0.041	<0.005	•	0.22	0.32
L 311100A	<0.15	11000.	<0.005	<0.005	51.	0.18	1.2
L 311100B	<0.15	11000.	<0.005	<0.005	51.	0.25	1.3
L 110300A	0.049	10000.	0.096	0.062	48.	0.082	0.34

	CO	CONDUCTIVITY	CR	CU	CL	FF	FL
L 1103008	0.043	10000.	0.077	0.054	50.	0.041	0.27
L 110300C	0.053	10000.	0.094	0.064	51.	0.044	0.30
L 110300D	0.067	10000.	0.12	0.084	50.	0.090	0.29
L 110300E	0.051	10000.	0.091	0.060	57.	0.045	0.55
L 110300F	0.069	10000.	0.11	0.080	48.	0.067	0.34

	HG	K	LI	MG	MN	MO	NA
L 170100*A	.	<40.	.	2.6	<0.001	.	<5.0
L 170100*B	.	<40.	.	2.9	<0.001	.	11.
L 170100A	<0.0085	<40.	0.060	1.6	<0.001	.	28.
L 170100B	<0.0085	<40.	0.060	0.75	<0.001	.	27.
L 170100C	.	<40.	0.060	0.61	<0.001	.	22.
L 170100D	.	<40.	0.060	6.3	0.0052	.	34.
L 170100E	.	<40.	0.060	0.89	<0.001	.	19.
L 170100F	.	<40.	0.030	0.57	<0.001	.	5.8
L 170100W	.	735.	.	0.46	0.014	2.5	15.
L 170100X	.	640.	.	0.23	0.011	2.3	13.
L 170100Y	.	870.	.	0.16	0.014	2.9	19.
L 170100Z	.	602.	.	0.21	0.0080	2.2	12.
L 271100A	.	<40.	.	0.60	<0.001	.	36.
L 271100B	.	<40.	.	5.5	<0.001	.	37.
L 272100A	.	<40.	.	0.35	<0.001	.	44.
L 272100B	.	<40.	.	1.0	<0.001	.	51.
L 273100A	.	.	.	.	.	.	.
L 273100B	.	<40.	.	0.89	<0.001	.	26.
L 274100A	.	<40.	.	0.12	<0.001	<0.04	<5.0
L 274100B	.	<40.	.	0.096	<0.001	<0.04	<5.0
L 275100A	.	<40.	.	0.30	<0.001	<0.04	<5.0
L 275100B	.	<40.	.	0.31	<0.001	<0.04	<5.0
L 276100A	.	<40.	.	0.23	<0.001	<0.04	<5.0
L 276100B	.	<40.	.	0.15	<0.001	<0.04	<5.0
L 277100A	.	<40.	.	0.39	<0.001	<0.04	<5.0
L 277100B	.	<40.	.	0.24	<0.001	<0.04	<5.0
L 371100A	.	<40.	.	1.5	<0.001	.	42.
L 371100B	.	<40.	.	0.68	<0.001	.	47.
L 372100A	.	<40.	.	0.51	<0.001	.	72.
L 372100B	.	<40.	.	0.34	<0.001	.	70.
L 170300*A	.	41.	0.32	<0.03	0.0080	0.37	12.
L 170300*AA	.	43.	0.46	1.7	0.025	0.46	14.
L 170300*B	.	41.	0.31	<0.03	0.0070	0.36	12.
L 170300*BB	.	43.	0.40	0.60	0.021	0.39	14.
L 170300*C	.	40.	0.30	<0.03	0.015	0.44	12.
L 170300*CC	.	44.	0.40	0.71	0.015	0.39	14.
L 170300*D	.	47.	0.36	<0.03	0.0070	0.43	13.
L 170300*E	.	42.	0.31	<0.03	0.011	0.40	12.
L 170300*F	.	42.	0.31	<0.03	0.018	0.40	12.
L 170300*H	.	40.	0.38	0.046	0.024	0.43	13.
L 170300*I	.	42.	0.42	0.041	0.030	0.48	13.
L 170300*J	.	46.	0.40	0.051	0.020	0.43	14.
L 170300*K	.	41.	0.40	0.048	0.029	0.45	13.
L 170300*L	.	44.	0.41	0.044	0.029	0.46	13.
L 170300*M	.	48.	0.43	0.044	0.027	0.49	15.

	HG	K	LI	MG	MN	MO	NA
L 170300•N	•	46.	0.40	0.043	0.023	0.44	14.
L 170300•O	•	50.	0.41	0.050	0.018	0.43	15.
L 170300•P	•	55.	•	1.6	0.025	0.45	17.
L 170300•Q	•	48.	•	2.2	0.035	0.42	14.
L 170300•R	•	50.	•	1.9	0.031	0.42	14.
L 170300•S	•	45.	•	2.6	0.043	0.43	13.
L 170300•T	•	55.	•	1.2	0.019	0.40	16.
L 170300•U	•	53.	•	1.8	0.029	0.42	15.
L 170300•V	•	51.	•	2.3	0.037	0.43	15.
L 170300•W	•	52.	•	2.7	0.043	0.48	15.
L 170300•X	•	43.	0.44	1.4	0.023	0.43	14.
L 170300•Y	•	43.	0.44	1.2	0.019	0.43	14.
L 170300•Z	•	42.	0.44	1.4	0.022	0.44	14.
L 170300A	•	35.	0.27	0.31	0.0070	0.35	11.
L 170300B	•	36.	0.28	0.77	0.0090	0.40	11.
L 170300C	•	32.	0.25	1.2	0.011	0.38	10.
L 170300D	•	36.	0.28	0.77	0.0070	0.38	12.
L 170300E	•	35.	0.27	1.3	0.0090	0.39	11.
L 170300F	•	33.	0.26	1.0	0.0090	0.38	11.
L 170300H	•	43.	0.32	<0.03	0.010	0.40	12.
L 170300I	•	36.	0.27	<0.03	0.011	0.39	11.
L 271300A	•	35.	0.22	0.86	0.0090	0.26	8.7
L 271300B	•	34.	0.22	1.7	0.011	0.28	8.4
L 272300A	•	23.	0.13	0.84	0.0050	0.15	4.9
L 272300B	•	23.	0.13	1.2	0.0050	0.17	4.9
L 273300A	•	15.	0.15	0.043	0.020	0.18	3.3
L 273300B	•	15.	0.15	0.039	0.019	0.18	3.3
L 274300A	•	12.	0.17	0.044	0.027	0.19	2.7
L 274300B	•	12.	0.20	0.040	0.031	0.26	2.8
L 275300A	•	9.7	0.15	0.038	0.023	0.15	2.3
L 275300B	•	9.8	0.15	0.037	0.024	0.15	2.3
L 276300A	•	9.2	0.15	0.041	0.025	0.15	2.2
L 276300B	•	11.	0.22	0.041	0.037	0.23	2.6
L 277300A	•	8.2	0.20	1.3	0.021	0.12	2.2
L 277300B	•	8.8	0.23	1.5	0.023	0.13	2.3
L 278300A	•	8.8	0.21	1.7	0.026	0.14	2.4
L 278300B	•	9.5	0.22	1.9	0.029	0.16	2.6
L 279300A	•	11.	0.30	2.3	0.037	0.19	3.3
L 279300B	•	11.	0.35	2.5	0.039	0.20	3.4
L 371300A	•	76.	0.53	1.8	0.011	0.55	21.
L 371300B	•	70.	0.48	1.7	0.013	0.53	19.
L 372300A	•	132.	0.90	0.85	0.0050	0.54	37.
L 372300B	•	129.	0.88	0.94	0.0070	0.56	37.
L 373300A	•	164.	1.1	0.71	0.019	0.61	48.
L 373300B	•	168.	1.1	0.84	0.021	0.66	49.
L 374300A	•	208.	1.3	0.045	0.020	0.65	60.

	HG	K	LI	MG	MN	MO	NA
L 374300B	.	208.	1.3	0.045	0.021	0.64	60.
L 375300A	.	237.	1.5	1.2	0.025	0.67	68.
L 375300B	.	212.	1.3	1.3	0.026	0.62	61.
L 376300A	.	319.	1.9	0.82	0.019	0.70	92.
L 376300B	.	270.	1.6	1.6	0.027	0.67	77.
L 170400*A	.	16.	0.40	2.7	<0.006	<0.01	6.5
L 170400*B	.	16.	0.41	3.2	<0.006	<0.01	6.5
L 170400A	.	18.	0.48	3.1	0.0060	<0.01	5.8
L 170400B	.	18.	0.50	2.9	0.016	<0.01	4.9
L 170400C	.	20.	0.59	1.7	0.023	0.061	7.0
L 170400D	.	19.	0.61	2.3	0.017	0.044	8.2
L 271400A	.	16.	0.40	1.7	<0.006	<0.01	6.4
L 271400B	.	16.	0.43	3.1	0.013	.	3.8
L 271400C	.	17.	0.47	5.4	0.018	0.027	6.0
L 271400D	.	16.	0.46	2.0	0.016	<0.01	5.2
L 272400A	.	12.	0.27	0.48	0.0080	0.018	1.4
L 272400B	.	12.	.	0.48	<0.006	<0.01	2.6
L 272400C	.	12.	0.34	0.18	<0.006	<0.01	3.7
L 272400D	.	11.	0.27	0.18	<0.006	<0.01	2.1
L 273400A	.	10.	0.17	0.23	<0.006	<0.01	4.3
L 273400B	.	10.	0.15	<0.17	<0.006	<0.01	4.2
L 273400C	.	11.	0.20	2.9	<0.006	<0.01	5.8
L 273400D	.	8.9	0.18	3.0	<0.006	<0.01	4.1
L 274400A	.	8.1	0.15	0.21	0.0080	<0.01	3.2
L 274400B	.	7.9	0.15	0.43	<0.006	<0.01	2.9
L 274400C	.	7.8	0.15	<0.17	<0.006	<0.01	2.6
L 274400D	.	7.5	0.12	0.19	<0.006	<0.01	3.3
L 275400A	.	5.0	0.057	<0.17	<0.006	<0.01	1.4
L 275400B	.	5.3	0.066	<0.17	<0.006	<0.01	1.7
L 275400C	.	5.6	0.087	<0.17	<0.006	<0.01	1.9
L 275400D	.	5.7	0.093	<0.17	0.0060	<0.01	2.0
L 276400A	.	5.5	0.093	0.28	<0.006	<0.01	1.2
L 276400B	.	4.8	0.093	0.22	<0.006	<0.01	2.2
L 276400C	.	4.7	0.076	<0.17	<0.006	<0.01	2.3
L 276400D	.	4.2	0.061	<0.17	<0.006	0.014	2.9
L 277400A	.	3.5	<0.002	<0.17	<0.006	<0.01	0.87
L 277400B	.	2.7	<0.002	<0.17	<0.006	<0.01	1.7
L 277400C	.	2.8	<0.002	<0.17	<0.006	<0.01	1.4
L 277400D	.	3.5	0.0090	<0.17	<0.006	<0.01	1.9
L 278400A	.	5.0	0.12	0.84	0.016	0.049	2.2
L 278400B	.	3.9	0.020	0.30	<0.006	<0.01	2.5
L 278400C	.	4.3	0.13	0.75	0.019	0.11	2.8
L 278400D	.	3.4	0.070	<0.17	<0.006	<0.01	1.5
L 279400A	.	6.9	0.045	0.18	<0.006	<0.01	1.4
L 279400B	.	7.2	0.045	0.23	<0.006	<0.01	2.1
L 279400C	.	5.2	0.41	<0.17	<0.006	<0.01	1.1

	HG	K	LI	MG	MN	MO	NA
L 279400D	.	5.4	0.032	0.24	<0.006	<0.01	1.6
L 170200A	.	773.	.	0.22	0.019	1.[illegible]	26.
L 170200B	.	951.	.	0.097	0.023	2.5	28.
L 170200C	.	824.	.	0.30	0.019	2.1	26.
L 170200D	.	816.	.	0.17	0.019	2.1	26.
L 170200E	.	805.	.	0.36	0.021	2.0	27.
L 170200F	.	686.	.	0.14	0.019	1.7	23.
L 170200G	.	870.	.	0.24	0.021	2.2	28.
L 170200H	.	1007.	.	0.40	0.026	2.6	30.
L 170200I	.	924.	.	0.18	0.021	2.4	29.
L 170200J	.	832.	.	0.36	0.021	2.1	27.
L 170200K	.	833.	.	0.20	0.020	2.1	27.
L 170200L	.	715.	.	0.25	0.019	1.8	25.
L 120100A	.	<40.	.	0.17	<0.001	.	<5.0
L 120100B	.	<40.	.	3.0	<0.001	.	7.4
L 120100C	.	<40.	.	0.12	<0.001	.	<5.0
L 120100D	.	.	.	.	.	.	.
L 120100E	.	<40.	.	0.13	<0.001	.	<5.0
L 120100F	.	<40.	.	1.0	<0.001	.	<5.0
L 120300A	.	19.	0.15	<0.03	0.014	0.32	6.2
L 120300B	.	16.	0.13	<0.03	0.015	0.31	5.5
L 120300C	.	19.	0.15	<0.03	0.014	0.31	6.2
L 120300D	.	18.	0.14	<0.03	0.013	0.28	5.9
L 120300E	.	20.	0.15	<0.03	0.014	0.32	6.3
L 120300F	.	19.	0.15	<0.03	0.014	0.33	6.0
L 110100A	.	<40.	.	0.099	<0.001	.	<5.0
L 110100B	.	<40.	.	0.12	<0.001	.	<5.0
L 110100C	.	<40.	.	0.37	<0.001	.	<5.0
L 110100D	.	<40.	.	4.0	<0.001	.	<5.0
L 110100E	.	<40.	.	4.7	<0.001	.	<5.0
L 110100F	.	<40.	.	6.1	<0.001	.	<5.0
L 211100A	.	<40.	.	2.9	<0.001	.	<5.0
L 211100B	.	<40.	.	1.8	<0.001	.	<5.0
L 212100A	.	<40.	.	1.3	<0.001	.	12.
L 212100B	.	<40.	.	0.95	<0.001	.	21.
L 311100A	.	<40.	.	0.97	<0.001	.	21.
L 311100B	.	<40.	.	0.29	<0.001	.	<5.0
L 110300A	.	12.	0.10	<0.03	0.013	0.27	4.0

	HG	K	LI	MG	MN	MO	NA
L 110300B	•	8.9	0.082	<0.03	0.012	0.27	3.5
L 110300C	•	11.	0.10	<0.03	0.013	0.30	4.0
L 110300D	•	10.	0.10	<0.03	0.017	0.31	3.9
L 110300E	•	11.	0.10	<0.03	0.012	0.30	4.1
L 110300F	•	10.	0.10	<0.03	0.017	0.31	3.8

	NI	PB	PH	SE	SI	SO4	SR
L 170100*A	<0.02	<0.07	12.	<0.12	0.57	1200.	4.2
L 170100*B	<0.02	<0.07	12.	<0.12	0.61	1200.	3.9
L 170100A	<0.02	<0.07	12.	<0.12	0.75	1200.	1.0
L 170100B	<0.02	<0.07	12.	<0.12	0.58	1200.	2.1
L 170100C	<0.02	<0.07	12.	<0.12	0.39	1300.	2.8
L 170100D	0.048	<0.07	12.	<0.12	1.3	1200.	2.8
L 170100E	<0.02	<0.07	12.	<0.12	0.81	1200.	4.0
L 170100F	<0.02	<0.07	12.	<0.12	0.65	1300.	1.4
L 170100W	0.23	•	13.	•	2.8	1100.	2.7
L 170100X	0.20	•	13.	•	2.3	1100.	2.7
L 170100Y	0.26	•	13.	•	2.5	1200.	2.6
L 170100Z	0.18	•	12.	•	1.9	1200.	2.9
L 271100A	<0.02	<0.07	12.	<0.12	0.52	1200.	2.3
L 271100B	<0.02	<0.07	12.	<0.12	1.0	1400.	1.6
L 272100A	<0.02	<0.07	12.	<0.12	0.71	1400.	1.6
L 272100B	<0.02	<0.07	12.	<0.12	0.79	1300.	1.8
L 273100A	•	•	12.	•	•	1300.	•
L 273100B	0.059	<0.07	12.	<0.12	1.5	1400.	1.0
L 274100A	<0.02	<0.07	12.	<0.12	0.91	1400.	0.61
L 274100B	<0.02	<0.07	12.	<0.12	1.2	1400.	0.62
L 275100A	<0.02	<0.07	11.	<0.12	1.7	1300.	0.52
L 275100B	0.12	<0.07	11.	<0.12	1.7	1200.	0.44
L 276100A	<0.02	<0.07	11.	<0.12	2.3	1300.	0.36
L 276100B	<0.02	•	11.	•	2.5	1300.	0.43
L 277100A	<0.02	<0.07	11.	<0.12	3.3	1100.	0.39
L 277100B	<0.02	<0.07	11.	<0.12	3.5	1100.	0.37
L 371100A	<0.02	<0.07	12.	<0.12	0.38	1200.	4.9
L 371100B	<0.02	<0.07	12.	<0.12	0.65	1300.	4.4
L 372100A	<0.02	<0.07	12.	<0.12	0.32	1300.	4.3
L 372100B	<0.02	<0.07	12.	<0.12	0.52	1300.	4.4
L 170300*A	0.042	•	12.	•	0.41	1100.	•
L 170300*AA	0.13	•	12.	•	0.61	1900.	18.
L 170300*B	0.041	•	12.	•	0.35	1100.	20.
L 170300*BB	0.054	•	12.	•	0.54	1200.	21.
L 170300*C	0.093	•	12.	•	0.43	1000.	•
L 170300*CC	0.068	•	12.	•	0.55	1100.	20.
L 170300*D	0.052	•	12.	•	0.48	1000.	23.
L 170300*E	0.067	•	12.	•	0.38	1200.	20.
L 170300*F	0.069	•	12.	•	0.58	1200.	21.
L 170300*H	0.14	•	13.	•	0.59	1100.	17.
L 170300*I	0.17	•	13.	•	0.66	1100.	17.
L 170300*J	0.12	•	12.	•	0.48	1200.	41.
L 170300*K	0.17	•	12.	•	0.73	1200.	16.
L 170300*L	0.17	•	12.	•	0.65	1200.	17.
L 170300*M	0.16	•	12.	•	0.68	1200.	37.

	NI	PB	PH	SE	SI	SO4	SR
L 170300*N	0.14	.	12.	.	0.54	1200.	17.
L 170300*O	0.093	.	12.	.	0.62	1200.	32.
L 170300*P	0.12	.	12.	.	0.65	1200.	20.
L 170300*Q	0.18	.	12.	.	0.74	1200.	15.
L 170300*R	0.16	.	12.	.	0.70	1100.	17.
L 170300*S	0.21	.	12.	.	0.89	1100.	14.
L 170300*T	0.099	.	12.	.	0.51	1100.	19.
L 170300*U	0.15	.	12.	.	0.70	1100.	17.
L 170300*V	0.19	.	12.	.	0.80	1200.	15.
L 170300*W	0.22	.	12.	.	0.96	1200.	15.
L 170300*X	0.11	.	12.	.	0.54	1200.	19.
L 170300*Y	0.11	.	12.	.	0.52	1200.	20.
L 170300*Z	0.12	.	12.	.	0.54	1000.	18.
L 170300A	0.045	.	13.	.	0.33	1100.	19.
L 170300B	0.068	.	13.	.	0.36	1100.	22.
L 170300C	0.068	.	13.	.	0.44	1100.	21.
L 170300D	0.051	.	13.	.	0.33	1100.	23.
L 170300E	0.062	.	13.	.	0.45	1100.	22.
L 170300F	0.061	.	13.	.	0.37	1100.	22.
L 170300H	0.064	.	13.	.	0.37	1100.	.
L 170300I	0.066	.	13.	.	0.35	1000.	.
L 271300A	0.057	.	12.	.	0.32	1100.	10.
L 271300B	0.070	.	12.	.	0.32	1200.	9.8
L 272300A	<0.003	.	12.	.	0.18	1200.	4.8
L 272300B	<0.003	.	12.	.	0.17	1200.	5.0
L 273300A	0.10	.	13.	.	0.54	1100.	4.1
L 273300B	0.11	.	13.	.	0.45	1100.	3.7
L 274300A	0.16	.	12.	.	0.52	1100.	1.9
L 274300B	0.19	.	12.	.	0.80	1100.	1.7
L 275300A	0.14	.	12.	.	0.57	1100.	1.7
L 275300B	0.14	.	12.	.	0.46	1200.	1.6
L 276300A	0.15	.	12.	.	0.51	1100.	2.8
L 276300B	0.22	.	13.	.	0.88	1100.	2.7
L 277300A	0.11	.	12.	.	0.49	1100.	1.5
L 277300B	0.12	.	12.	.	0.50	1100.	1.4
L 278300A	0.13	.	12.	.	0.54	1000.	1.5
L 278300B	0.15	.	12.	.	0.59	1100.	1.3
L 279300A	0.18	.	12.	.	0.75	1000.	1.2
L 279300B	0.19	.	12.	.	0.78	1000.	1.1
L 371300A	0.074	.	12.	.	0.41	1100.	19.
L 371300B	0.085	.	12.	.	0.43	1200.	24.
L 372300A	<0.03	.	13.	.	0.24	1200.	29.
L 372300B	<0.03	.	12.	.	0.33	1200.	30.
L 373300A	0.11	.	13.	.	0.62	1100.	47.
L 373300B	0.13	.	13.	.	0.58	1100.	37.
L 374300A	0.12	.	12.	.	0.55	1200.	34.

	NI	PB	PH	SE	SI	SO4	SR
L 374300B	0.12	.	12.	.	0.64	1200.	35.
L 375300A	0.15	.	12.	.	0.61	1300.	44.
L 375300B	0.16	.	12.	.	0.62	1300.	23.
L 376300A	0.11	.	13.	.	0.54	1200.	43.
L 376300B	0.16	.	13.	.	0.64	1200.	25.
L 170400*A	0.039	.	12.	.	1.1	1400.	13.
L 170400*B	<0.01	.	12.	.	1.3	1500.	13.
L 170400A	<0.01	.	12.	.	2.4	1400.	14.
L 170400B	0.062	.	12.	.	2.6	1500.	13.
L 170400C	0.067	.	13.	.	2.9	1400.	13.
L 170400D	0.069	.	13.	.	4.0	1200.	13.
L 271400A	<0.01	.	13.	.	3.0	1200.	6.3
L 271400B	0.063	.	13.	.	3.7	1300.	6.3
L 271400C	0.043	.	13.	.	4.2	1300.	5.9
L 271400D	0.067	.	13.	.	1.1	1300.	5.5
L 272400A	<0.01	.	12.	.	2.3	840.	2.7
L 272400B	<0.01	.	12.	.	2.5	1000.	2.5
L 272400C	<0.01	.	12.	.	3.5	640.	3.0
L 272400D	<0.01	.	12.	.	3.8	1300.	3.4
L 273400A	<0.01	.	12.	.	2.0	<10.	2.1
L 273400B	<0.01	.	12.	.	0.45	<10.	2.0
L 273400C	0.41	.	12.	.	2.2	<10.	2.2
L 273400D	<0.01	.	12.	.	0.58	38.	1.9
L 274400A	<0.01	.	12.	.	0.90	<10.	1.2
L 274400B	<0.01	.	12.	.	0.77	<10.	1.2
L 274400C	<0.01	.	13.	.	0.76	<10.	1.4
L 274400D	<0.01	.	13.	.	0.93	<10.	1.4
L 275400A	<0.01	.	12.	.	0.52	<10.	0.68
L 275400B	<0.01	.	13.	.	0.58	<10.	0.69
L 275400C	0.037	.	13.	.	1.0	<10.	0.81
L 275400D	<0.01	.	13.	.	0.69	<10.	0.88
L 276400A	<0.01	.	12.	.	0.70	<10.	0.46
L 276400B	<0.01	.	12.	.	0.83	<10.	0.45
L 276400C	<0.01	.	13.	.	0.75	<10.	0.53
L 276400D	<0.01	.	13.	.	0.85	<10.	0.59
L 277400A	<0.01	.	12.	.	0.65	<10.	0.33
L 277400B	<0.01	.	12.	.	0.78	<10.	0.30
L 277400C	<0.01	.	12.	.	0.82	<10.	0.36
L 277400D	<0.01	.	12.	.	0.94	<10.	0.39
L 278400A	<0.01	.	12.	.	1.1	<10.	0.26
L 278400B	0.017	.	12.	.	0.81	<10.	0.24
L 278400C	<0.01	.	12.	.	1.1	<10.	0.29
L 278400D	<0.01	.	12.	.	1.0	<10.	0.28
L 279400A	0.015	.	12.	.	0.19	<10.	0.33
L 279400B	<0.01	.	12.	.	0.18	<10.	0.34
L 279400C	<0.01	.	12.	.	0.15	<10.	0.33

	NI	PB	PH	SE	SI	SO4	SR
L 279400D	<0.01	.	12.	.	0.14	<10.	0.36
L 170200A	0.29	.	12.	.	6.9	1200.	8.9
L 170200B	0.35	.	12.	.	3.9	1200.	8.1
L 170200C	0.31	.	12.	.	4.0	1200.	8.9
L 170200D	0.30	.	12.	.	6.6	1200.	8.6
L 170200E	0.30	.	12.	.	7.9	1200.	9.0
L 170200F	0.26	.	12.	.	3.1	1200.	9.0
L 170200G	0.32	.	12.	.	6.3	1200.	8.8
L 170200H	0.36	.	12.	.	8.1	1200.	7.9
L 170200I	0.32	.	12.	.	3.7	1200.	8.5
L 170200J	0.30	.	12.	.	6.8	1200.	9.3
L 170200K	0.31	.	12.	.	11.	1200.	9.1
L 170200L	0.27	.	12.	.	5.6	1200.	9.5
L 120100A	<0.02	<0.07	12.	<0.12	0.62	1400.	1.8
L 120100B	<0.02	<0.07	12.	<0.12	0.97	1400.	1.7
L 120100C	<0.02	<0.07	12.	<0.12	0.59	1700.	1.8
L 120100D	.	.	12.	.	.	1400.	.
L 120100E	<0.02	<0.07	12.	<0.12	0.41	1700.	2.0
L 120100F	<0.02	.	12.	.	0.38	1800.	4.1
L 120300A	0.098	.	12.	.	0.61	1400.	.
L 120300B	0.11	.	12.	.	0.61	1500.	.
L 120300C	0.094	.	12.	.	0.83	1500.	.
L 120300D	0.084	.	12.	.	0.52	1500.	.
L 120300E	0.088	.	12.	.	0.51	1400.	.
L 120300F	0.093	.	12.	.	0.51	1400.	.
L 110100A	<0.02	<0.07	12.	<0.12	0.98	1500.	1.4
L 110100B	<0.02	<0.07	12.	<0.12	0.62	2000.	1.4
L 110100C	<0.02	<0.07	12.	<0.12	0.61	1400.	1.3
L 110100D	<0.02	<0.07	12.	<0.12	1.5	1300.	1.5
L 110100E	<0.02	<0.07	12.	<0.12	2.4	1700.	1.4
L 110100F	<0.02	<0.07	12.	<0.12	1.3	1600.	1.4
L 211100A	<0.02	<0.07	12.	<0.12	1.0	1200.	1.3
L 211100B	<0.02	<0.07	12.	<0.12	0.65	1300.	1.4
L 212100A	<0.02	<0.07	12.	<0.12	1.1	1400.	0.81
L 212100B	<0.02	<0.07	12.	<0.12	0.82	1400.	0.81
L 311100A	<0.02	<0.07	12.	<0.12	0.54	1500.	4.6
L 311100B	<0.02	<0.07	12.	<0.12	0.67	1400.	4.6
L 110300A	0.089	.	12.	.	0.61	1500.	.

	NI	PB	PH	SE	SI	SO4	SR
L 110300B	0.079	.	12.	.	1.6	1600.	.
L 110300C	0.083	.	12.	.	0.55	1600.	.
L 110300D	0.10	.	12.	.	1.1	1600.	.
L 110300E	0.083	.	12.	.	0.55	1500.	.
L 110300F	0.10	.	12.	.	0.61	1500.	.

	TDS	TI	TIC	TOC	U	V	ZN
L 170100*A	2300.	<0.002	.	1.1	<0.30	<0.01	0.21
L 170100*B	2200.	<0.002	.	.	<0.30	<0.01	0.27
L 170100A	2300.	<0.002	.	.	<0.30	<0.01	0.11
L 170100B	3800.	<0.002	.	.	<0.30	<0.01	0.10
L 170100C	3900.	<0.002	.	.	<0.30	<0.01	0.13
L 170100D	4200.	<0.002	.	.	<0.30	<0.01	0.092
L 170100E	4200.	<0.002	.	.	<0.30	<0.01	0.21
L 170100F	2900.	<0.002	.	.	<0.30	<0.01	0.30
L 170100W	.	0.16	.	.	.	0.27	0.015
L 170100X	.	0.13	.	1.3	.	0.22	0.0080
L 170100Y	.	0.16	.	1.4	.	0.33	0.015
L 170100Z	.	0.13	.	.	.	0.19	.
L 271100A	2300.	<0.002	.	.	<0.30	<0.01	0.089
L 271100B	2600.	<0.002	.	.	<0.30	<0.01	0.090
L 272100A	2300.	<0.002	.	.	<0.30	<0.01	0.30
L 272100B	2300.	<0.002	.	.	<0.30	<0.01	0.17
L 273100A	2800.	.	.	.	.	.	.
L 273100B	2700.	<0.002	.	.	<0.30	<0.01	0.11
L 274100A	2400.	<0.002	.	.	.	<0.01	0.0026
L 274100B	2600.	<0.002	.	.	.	<0.01	0.023
L 275100A	2300.	<0.002	.	.	.	<0.01	0.014
L 275100B	2300.	<0.002	.	.	.	<0.01	0.0083
L 276100A	2200.	<0.002	.	.	.	<0.01	0.022
L 276100B	2100.	<0.002	.	.	.	<0.01	0.010
L 277100A	2300.	<0.002	.	.	.	<0.01	<0.002
L 277100B	2300.	<0.002	.	.	.	<0.01	<0.002
L 371100A	3500.	<0.002	.	.	<0.30	<0.01	0.21
L 371100B	3800.	<0.002	.	.	<0.30	<0.01	0.21
L 372100A	3000.	<0.002	.	.	<0.30	<0.01	0.11
L 372100B	3700.	<0.002	.	.	<0.30	<0.01	0.11
L 170300*A	3800.	0.076	.	.	.	0.076	0.010
L 170300*AA	3700.	0.41	.	.	.	0.30	0.049
L 170300*B	3900.	0.066	.	.	.	0.063	0.014
L 170300*BB	3600.	0.12	.	.	.	0.094	0.012
L 170300*C	3800.	0.18	.	.	.	0.17	0.047
L 170300*CC	3500.	0.15	.	.	.	0.12	0.017
L 170300*D	3800.	0.091	.	.	.	0.087	0.019
L 170300*E	3900.	0.15	.	.	.	0.15	0.028
L 170300*F	3900.	0.14	.	.	.	0.14	0.029
L 170300*H	3800.	0.38	.	.	.	0.33	0.055
L 170300*I	3900.	0.48	.	.	.	0.43	0.070
L 170300*J	3800.	0.32	.	.	.	0.28	0.044
L 170300*K	3800.	0.45	.	.	.	0.38	0.070
L 170300*L	3600.	0.45	.	.	.	0.38	0.071
L 170300*M	3700.	0.43	.	.	.	0.39	0.065

	TDS	TI	TIC	TOC	U	V	ZN
L 170300•N	3500.	0.37	•	•	•	0.34	0.056
L 170300•O	3600.	0.27	•	•	•	0.25	0.035
L 170300•P	3900.	0.48	•	•	•	0.37	0.036
L 170300•Q	3900.	0.67	•	•	•	0.50	0.057
L 170300•R	3800.	0.57	•	•	•	0.43	0.048
L 170300•S	3700.	0.81	•	•	•	0.61	0.073
L 170300•T	3700.	0.35	•	•	•	0.27	0.025
L 170300•U	3500.	0.55	•	•	•	0.42	0.043
L 170300•V	3700.	0.71	•	•	•	0.54	0.060
L 170300•W	3700.	0.83	•	•	•	0.62	0.073
L 170300•X	3800.	0.32	•	•	•	0.24	0.039
L 170300•Y	3800.	0.29	•	•	•	0.23	0.036
L 170300•Z	3700.	0.33	•	•	•	0.25	0.042
L 170300A	3900.	0.071	•	1.9	•	0.061	0.015
L 170300B	3900.	0.12	•	0.50	•	0.12	0.021
L 170300C	3900.	0.14	•	•	•	0.13	0.031
L 170300D	3900.	0.085	•	•	•	0.080	0.016
L 170300E	3900.	0.12	•	•	•	0.12	0.025
L 170300F	4000.	0.11	•	•	•	0.098	0.022
L 170300H	4000.	0.14	•	•	•	0.13	0.023
L 170300I	4000.	0.14	•	•	•	0.14	0.030
L 271300A	3700.	0.11	•	•	•	0.11	0.022
L 271300B	3700.	0.13	•	•	•	0.12	0.031
L 272300A	3800.	0.081	•	•	•	0.088	<0.003
L 272300B	3700.	0.086	•	•	•	0.091	<0.003
L 273300A	3700.	0.30	•	•	•	0.28	0.042
L 273300B	3700.	0.29	•	•	•	0.27	0.044
L 274300A	3600.	0.42	•	•	•	0.37	0.062
L 274300B	3600.	0.52	•	•	•	0.46	0.077
L 275300A	3500.	0.38	•	•	•	0.35	0.053
L 275300B	3400.	0.40	•	•	•	0.36	0.054
L 276300A	3400.	0.42	•	•	•	0.37	0.061
L 276300B	3400.	0.62	•	•	•	0.54	0.093
L 277300A	3600.	0.40	•	•	•	0.29	0.028
L 277300B	3400.	0.45	•	•	•	0.34	0.034
L 278300A	3600.	0.49	•	•	•	0.38	0.039
L 278300B	3600.	0.56	•	•	•	0.42	0.047
L 279300A	3400.	0.71	•	•	•	0.54	0.061
L 279300B	3400.	0.76	•	•	•	0.58	0.066
L 671300A	4100.	0.15	•	•	•	0.15	0.032
L 671300B	4000.	0.18	•	•	•	0.17	0.041
L 372300A	4200.	0.082	•	•	•	0.069	0.030
L 372300B	4100.	0.097	•	•	•	0.083	0.034
L 373300A	4300.	0.29	•	•	•	0.25	0.047
L 373300B	4300.	0.33	•	•	•	0.29	0.049
L 374300A	4400.	0.31	•	•	•	0.28	0.047

	TDS	TI	TIC	TOC	U	V	ZN
L 374300B	4300.	0.33	.	.	.	0.31	0.048
L 375300A	4200.	0.48	.	.	.	0.36	0.061
L 375300B	4200.	0.40	.	.	.	0.35	0.064
L 376300A	4300.	0.30	.	.	.	0.26	0.061
L 376300B	4400.	0.43	.	.	.	0.38	0.068
L 170400+A	4100.	<0.02	6.3	3.5	.	<0.01	<0.01
L 170400+B	4100.	<0.02	5.7	3.6	.	<0.01	<0.01
L 170400A	4100.	<0.02	6.3	3.5	.	<0.01	<0.01
L 170400B	4100.	<0.02	5.7	3.6	.	<0.01	<0.01
L 170400C	4000.	0.15	<2.0	4.4	.	0.027	<0.01
L 170400D	3700.	0.18	<2.0	4.6	.	0.035	<0.01
L 271400A	3100.	<0.02	<2.0	2.2	.	<0.01	<0.01
L 271400B	3700.	<0.02	<2.0	2.4	.	<0.01	<0.01
L 271400C	3100.	0.026	<2.0	2.8	.	<0.01	<0.01
L 271400D	3700.	<0.02	<2.0	2.1	.	<0.01	<0.01
L 272400A	2800.	<0.02	<2.0	1.9	.	<0.01	0.018
L 272400B	3000.	<0.02	<2.0	3.2	.	0.044	<0.01
L 272400C	2200.	<0.02	<2.0	1.8	.	0.018	<0.01
L 272400D	3400.	<0.02	<2.0	1.9	.	<0.01	<0.01
L 273400A	1600.	<0.02	<2.0	2.5	.	<0.01	<0.01
L 273400B	1700.	<0.01	<2.0	3.0	.	<0.01	<0.01
L 273400C	1900.	<0.02	<2.0	1.7	.	<0.01	<0.01
L 273400D	1900.	<0.02	<2.0	1.7	.	<0.01	<0.01
L 274400A	1700.	<0.02	<2.0	2.7	.	<0.01	<0.01
L 274400B	1600.	<0.02	<2.0	2.9	.	0.11	<0.01
L 274400C	1600.	<0.02	<2.0	2.2	.	<0.01	<0.01
L 274400D	1900.	<0.02	<2.0	2.3	.	<0.01	<0.01
L 275400A	1600.	<0.02	<2.0	1.4	.	<0.01	<0.01
L 275400B	1700.	<0.02	<2.0	1.5	.	<0.01	<0.01
L 275400C	1700.	<0.02	<2.0	1.3	.	<0.01	<0.01
L 275400D	1700.	<0.02	<2.0	1.2	.	0.084	<0.01
L 276400A	1500.	<0.02	<2.0	1.9	.	<0.01	<0.01
L 276400B	1500.	<0.02	<2.0	1.6	.	<0.01	<0.01
L 276400C	1600.	<0.02	<2.0	1.7	.	<0.01	<0.01
L 276400D	1600.	<0.02	<2.0	1.5	.	<0.01	<0.01
L 277400A	1800.	<0.02	.	2.2	.	<0.01	<0.01
L 277400B	1900.	<0.02	.	1.9	.	<0.01	<0.01
L 277400C	1800.	<0.02	.	1.3	.	<0.01	<0.01
L 277400D	1900.	<0.02	.	1.6	.	<0.01	<0.01
L 278400A	1800.	0.13	.	1.9	.	0.094	<0.01
L 278400B	1700.	<0.02	.	1.5	.	0.023	<0.01
L 278400C	1800.	0.17	.	1.6	.	0.16	0.031
L 278400D	1600.	<0.02	.	1.7	.	<0.01	<0.01
L 279400A	1800.	<0.02	.	2.0	.	<0.01	<0.01
L 279400B	1800.	<0.02	.	1.6	.	<0.01	<0.01
L 279400C	1800.	<0.02	.	1.6	.	<0.01	<0.01

	TDS	TI	TIC	TOC	U	V	ZN
L 279400D	1800.	<0.02	.	1.4	.	<0.01	<0.01
L 170200A	3800.	0.28	.	.	.	0.36	0.030
L 170200B	3800.	0.18	.	.	.	0.45	0.030
L 170200C	3600.	0.20	.	.	.	0.37	0.022
L 170200D	3900.	0.32	.	.	.	0.37	0.027
L 170200E	3200.	0.35	.	.	.	0.38	0.031
L 170200F	3400.	0.14	.	.	.	0.31	0.021
L 170200G	3600.	0.30	.	.	.	0.40	0.032
L 170200H	3500.	0.45	.	.	.	0.48	0.034
L 170200I	3400.	0.20	.	.	.	0.42	0.028
L 170200J	3300.	0.36	.	.	.	0.39	0.029
L 170200K	3100.	0.33	.	.	.	0.38	0.027
L 170200L	4000.	0.18	.	.	.	0.31	0.030
L 120100A	3700.	<0.002	.	.	<0.30	<0.01	0.42
L 120100B	.	<0.002	.	.	<0.30	<0.01	0.23
L 120100C	3600.	<0.002	.	.	<0.30	<0.01	0.35
L 120100D	2900.	.	.	1.4	.	.	.
L 120100E	4100.	<0.002	.	6.8	<0.30	<0.01	0.30
L 120100F	4000.	<0.002	.	.	.	<0.01	0.13
L 120300A	3900.	0.17	.	.	.	0.16	0.041
L 120300B	4200.	0.20	.	.	.	0.18	0.052
L 120300C	4200.	0.18	.	.	.	0.16	0.046
L 120300D	4300.	0.16	.	.	.	0.15	0.037
L 120300E	4100.	0.19	.	.	.	0.18	0.043
L 120300F	4100.	0.18	.	0.60	.	0.16	0.042
L 110100A	3600.	<0.002	.	.	<0.30	<0.01	0.45
L 110100B	4200.	<0.002	.	.	<0.30	<0.01	0.49
L 110100C	4100.	<0.002	.	.	<0.30	<0.01	0.52
L 110100D	4100.	<0.002	.	2.2	<0.30	<0.01	0.63
L 110100E	4100.	<0.002	.	0.96	<0.30	<0.01	0.41
L 110100F	2700.	<0.002	.	.	<0.30	<0.01	0.47
L 211100A	3700.	<0.002	.	.	<0.30	<0.01	0.27
L 211100B	3700.	<0.002	.	.	<0.30	<0.01	0.24
L 212100A	2300.	<0.002	.	.	<0.30	<0.01	0.052
L 212100B	2300.	<0.002	.	.	<0.30	<0.01	0.044
L 311100A	3800.	<0.002	.	.	<0.30	<0.01	0.37
L 311100B	2500.	<0.002	.	.	<0.30	<0.01	0.58
L 110300A	3700.	0.16	.	.	.	0.15	0.049

	TDS	TI	TIC	TOC	U	V	ZN
L 1103008	3800.	0.14	.	.	.	0.13	0.041
L 110300C	3900.	0.17	.	0.70	.	0.17	0.039
L 110300D	3900.	0.23	.	.	.	0.22	0.053
L 110300E	4100.	0.16	.	0.70	.	0.16	0.039
L 110300F	4100.	0.22	.	0.70	.	0.20	0.052

J.3 Batch Equilibration Extractions of Disposal Media: Protocol Steps 1 and 2

The six disposal media used in the attenuation steps at the protocol were subjected to deionized water leaching (Steps 1 and 2). The intent of these extraction studies was to evaluate the nature and amount of species that could be contributed by the media to the FBC leachate. The six media used were shale, coal mine interburden, sandstone, glacial till, alluvium, and limestone. The following media extractions were conducted:

1. Early in the experimental program, Step 1 batch leaching (with four replications) was performed on samples of shale, interburden, sandstone, and Greer limestone. (The Greer limestone was subsequently replaced by the Greenbrier limestone in the protocol);

2. Duplicate Step 1 batch extractions were performed on all six disposal media (Greer limestone was not included since it was replaced by Greenbrier limestone);

3. More extensive leaching of two disposal media (shale and sandstone) was conducted later in the program. Eight repetitions of the leaching process were performed on each of these media (Step 1 followed by seven repetitions of Step 2).

For all samples presented in this section, the codes include 'L' for leachates as the first character. The protocol step is always one (even though the steps were repetitions of Step 2), and the number of days leached is seven. There is neither a substep nor a waste so they are both coded as zero. Samples with a single replication code (A, B, C, or D) were generated and analyzed early in the project, while those with double replication codes (AA, BB, CC, or DD) were run relatively later in the project, (see Appendix D). The attenuation media codes are as follows:

08 Shale

09 Interburden

10 Sandstone

11 Greer limestone (discontinued mid-project)

12 Glacial till

13 Alluvium

14 Greenbrier limestone.

The same notations made in Section J.2 regarding order of presentation, detection limits, accuracy, and units apply to the data in this section.

	AL	AS	B	BA	BE	CA	CD
L 170088A	0.37	.	0.35	0.31	.	71.	<0.005
L 170088B	0.28	.	0.25	0.30	.	66.	<0.005
L 170088C	0.28	.	0.18	0.30	.	72.	<0.005
L 170088D	0.28	.	0.16	0.30	.	76.	<0.005
L 170089A	0.41	.	0.13	0.22	.	18.	<0.005
L 170089B	0.467	.	0.15	0.22	.	51.	.
L 170089C	0.47	.	0.17	0.24	.	55.	<0.005
L 170089D	0.61	.	0.11	0.21	.	50.	.
L 170010A	0.44	.	0.099	0.25	.	65.	<0.005
L 170010B	0.42	.	0.088	0.25	.	62.	<0.005
L 170010C	0.48	.	.	0.25	.	64.	<0.005
L 170010D	0.45	.	0.099	0.26	.	63.	<0.005
L 170011A	0.44	.	0.22	0.31	.	22.	<0.005
L 170011B	0.52	.	0.21	0.32	.	22.	<0.005
L 170011C	0.54	.	0.19	0.31	.	22.	<0.005
L 170011D	0.44	.	0.22	0.30	.	22.	<0.005
L 170008AA	<0.25	.	0.080	0.13	0.0030	53.	<0.04
L 170008BB	<0.25	.	<0.04	0.11	<0.002	51.	<0.04
L 170008CC	<0.25	.	<0.04	0.12	<0.002	55.	<0.04
L 170008DD	<0.25	.	<0.04	0.11	<0.002	53.	<0.04
L 170009AA	<0.25	.	<0.04	0.093	0.0030	28.	<0.04
L 170009BB	<0.25	.	0.10	0.091	0.0050	27.	<0.04
L 170010AA	<0.25	.	<0.04	0.024	<0.002	75.	<0.04
L 170010BB	<0.25	.	<0.04	0.089	<0.002	71.	<0.04
L 170010CC	<0.25	.	<0.04	0.11	<0.002	62.	<0.04
L 170010DD	<0.25	.	<0.04	0.055	<0.002	59.	<0.04
L 170012AA	<0.25	.	0.070	0.14	<0.002	21.	0.13
L 170012BB	<0.25	.	<0.04	0.14	<0.002	22.	<0.04
L 170013AA	<0.25	.	<0.04	0.070	<0.002	1.0	<0.04
L 170013BB	<0.25	.	<0.04	0.072	<0.002	1.0	<0.04
L 170014AA	<0.25	.	<0.04	0.11	<0.002	10.	<0.04
L 170014BB	0.33	.	<0.04	0.12	<0.002	9.8	<0.04

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 170008A	<0.15	420.	<0.005	<0.005	.	0.65	0.22
L 170008B	<0.15	400.	<0.005	<0.005	.	0.064	0.33
L 170008C	<0.15	410.	<0.005	<0.005	.	0.049	0.24
L 170008D	<0.15	390.	<0.005	<0.005	.	0.094	0.26
L 170009A	0.49	430.	0.0070	0.059	.	1.5	<0.10
L 170009B	0.83	440.	0.021	0.082	.	1.5	<0.10
L 170009C	0.67	430.	0.015	0.053	.	1.1	<0.10
L 170009D	0.79	430.	0.019	0.076	.	1.3	<0.10
L 170010A	0.30	450.	0.015	<0.005	.	0.10	0.23
L 170010B	0.32	440.	0.013	<0.005	.	0.076	0.26
L 170010C	0.36	460.	0.016	<0.005	.	0.29	0.26
L 170010D	0.39	450.	0.018	<0.005	.	0.059	0.28
L 170011A	<0.15	310.	<0.005	<0.005	.	0.030	0.96
L 170011B	<0.15	300.	<0.005	<0.005	.	.	1.0
L 170011C	<0.15	310.	<0.005	<0.005	.	0.012	1.1
L 170011D	<0.15	290.	<0.005	<0.005	.	0.028	1.2
L 170008AA	<0.03	330.	0.033	<0.005	<2.0	0.051	0.39
L 170008BB	<0.03	350.	<0.005	<0.005	<2.0	0.062	0.39
L 170008CC	<0.03	370.	.	0.016	<2.0	<0.03	0.37
L 170008DD	<0.03	360.	<0.005	<0.005	<2.0	<0.03	0.38
L 170009AA	0.14	320.	0.12	0.088	<2.0	0.24	0.13
L 170009BB	0.15	280.	0.15	0.087	<2.0	0.23	0.12
L 170010AA	0.054	510.	0.021	0.0030	<2.0	<0.04	0.30
L 170010BB	<0.03	490.	0.016	0.0070	<2.0	<0.04	0.39
L 170010CC	<0.03	510.	<0.005	<0.005	<2.0	<0.03	0.32
L 170010DD	<0.03	470.	0.0050	0.0050	<2.0	<0.03	0.35
L 170012AA	<0.03	150.	<0.005	<0.005	<2.0	<0.04	1.0
L 170012BB	<0.03	150.	<0.005	<0.005	<2.0	<0.04	1.0
L 170013AA	<0.03	30.	<0.005	<0.005	<2.0	<0.04	0.080
L 170013BB	<0.03	50.	<0.005	<0.005	<2.0	<0.04	0.10
L 170014AA	<0.03	210.	.	<0.005	4.2	<0.04	1.1
L 170014BB	<0.03	210.	<0.005	<0.005	4.0	<0.04	1.0

	HG	K	LI	MG	MN	MO	NA
L 170008A	.	<40.	.	9.9	0.20	<0.04	<5.0
L 170008B	.	53.	.	10.	0.16	0.072	<5.0
L 170008C	.	46.	.	10.	0.21	<0.04	<5.0
L 170008D	.	40.	.	10.	0.20	<0.04	<5.0
L 170009A	.	66.	.	16.	0.37	0.10	<5.0
L 170009B	.	160.	.	17.	0.39	0.38	<5.0
L 170009C	.	115.	.	17.	0.38	0.24	<5.0
L 170009D	.	150.	.	17.	0.38	0.35	<5.0
L 170010A	.	116.	.	19.	0.37	0.24	<5.0
L 170010B	.	113.	.	18.	0.33	0.26	<5.0
L 170010C	.	124.	.	19.	0.38	0.27	<5.0
L 170010D	.	130.	.	19.	0.35	0.30	<5.0
L 170011A	.	<40.	.	5.2	<0.001	0.12	6.7
L 170011B	.	50.	.	5.2	<0.001	0.16	7.5
L 170011C	.	49.	.	5.3	<0.001	0.20	7.7
L 170011D	.	<40.	.	5.2	<0.001	0.13	6.4
L 170008AA	.	5.0	0.012	7.2	0.13	<0.01	2.3
L 170008BB	.	4.3	<0.002	7.0	0.12	<0.01	1.9
L 170008CC	.	5.1	<0.002	8.2	0.14	0.053	1.7
L 170008DD	.	3.5	<0.002	7.5	0.13	<0.01	0.76
L 170009AA	.	4.5	0.039	9.6	0.19	<0.01	1.2
L 170009BB	.	5.1	0.029	9.7	0.18	<0.01	1.5
L 170010AA	.	8.1	0.040	23.	0.65	<0.01	1.6
L 170010BB	.	7.5	0.030	21.	0.60	<0.01	1.7
L 170010CC	.	7.2	<0.002	18.	0.42	0.025	1.9
L 170010DD	.	7.7	<0.002	17.	0.36	0.083	1.7
L 170012AA	.	<0.21	<0.002	4.1	<0.006	0.027	5.7
L 170012BB	.	<0.22	<0.002	4.6	<0.006	<0.01	1.2
L 170013AA	.	<0.21	<0.002	<0.17	0.018	<0.01	1.4
L 170013BB	.	<0.21	<0.002	<0.17	0.040	<0.01	1.8
L 170014AA	.	7.7	<0.002	2.6	<0.006	0.035	13.
L 170014BB	.	7.9	<0.002	2.5	<0.006	<0.01	12.

	NI	PB	PH	SE	SI	SO4	SR
L 170008A	<0.02	.	8.1	.	8.4	79.	0.20
L 170008B	<0.02	.	8.3	.	7.6	76.	0.20
L 170008C	<0.02	.	8.1	.	8.8	83.	0.20
L 170008D	<0.02	.	8.5	.	8.6	85.	0.21
L 170009A	0.62	.	5.3	.	27.	180.	0.36
L 170009B	0.67	.	5.9	.	29.	190.	0.37
L 170009C	0.64	.	6.8	.	28.	190.	0.37
L 170009D	0.66	.	5.5	.	29.	180.	0.36
L 170010A	0.038	.	8.0	.	10.	140.	0.20
L 170010B	0.025	.	7.8	.	10.	210.	0.18
L 170010C	0.023	.	7.9	.	10.	140.	0.19
L 170010D	0.032	.	7.9	.	10.	140.	0.18
L 170011A	<0.02	.	8.5	.	5.7	58.	0.79
L 170011B	<0.02	.	8.5	.	5.8	66.	0.78
L 170011C	<0.02	.	8.6	.	5.8	70.	0.79
L 170011D	<0.02	.	8.1	.	5.7	74.	0.77
L 170008AA	0.069	.	7.9	.	3.7	61.	0.13
L 170008BB	0.072	.	8.1	.	3.7	74.	0.12
L 170008CC	0.019	.	8.1	.	4.0	66.	0.14
L 170008DD	0.047	.	7.8	.	3.8	63.	0.12
L 170009AA	0.25	.	5.6	.	13.	140.	0.19
L 170009BB	0.26	.	5.4	.	14.	130.	0.20
L 170010AA	<0.01	.	7.6	.	5.0	170.	0.19
L 170010BB	<0.01	.	7.7	.	4.8	170.	0.17
L 170010CC	0.044	.	7.5	.	4.9	140.	0.14
L 170010DD	<0.01	.	7.6	.	4.9	130.	0.14
L 170012AA	<0.01	.	8.1	.	3.8	15.	0.0050
L 170012BB	<0.01	.	8.2	.	3.9	15.	0.0090
L 170013AA	<0.01	.	5.9	.	5.3	4.7	<0.002
L 170013BB	0.048	.	5.8	.	5.8	4.4	<0.002
L 170014AA	0.037	.	8.7	.	3.4	51.	0.33
L 170014BB	0.029	.	8.8	.	3.3	38.	0.33

	TDS	TI	TIC	TOC	U	V	ZN
L 170008A	.	.	.	2.3	.	0.036	<0.002
L 170008B	.	.	.	2.3	.	0.060	<0.002
L 170008C	.	.	.	.	.	0.054	<0.002
L 170008D	.	.	.	.	.	0.052	<0.002
L 170009A	.	.	.	.	.	0.099	0.75
L 170009B	.	0.023	.	1.2	.	0.15	0.82
L 170009C	.	0.015	.	1.2	.	0.12	0.73
L 170009D	.	0.019	.	.	.	0.14	0.80
L 170010A	.	0.010	.	.	.	0.13	<0.002
L 170010B	.	0.017	.	.	.	0.13	0.010
L 170010C	.	0.017	.	1.0	.	0.14	<0.002
L 170010D	.	0.017	.	1.1	.	0.14	<0.002
L 170011A	.	<0.002	.	2.0	.	0.030	<0.002
L 170011B	.	.	.	.	.	0.035	<0.002
L 170011C	.	.	.	.	.	0.042	<0.002
L 170011D	.	<0.002	.	1.9	.	0.033	<0.002
L 170008AA	140.	<0.02	24.	2.0	.	<0.01	<0.01
L 170008BB	190.	<0.02	24.	2.0	.	<0.01	0.026
L 170008CC	220.	0.057	20.	6.8	.	<0.01	0.017
L 170008DD	230.	<0.02	20.	6.7	.	<0.01	<0.01
L 170009AA	300.	<0.02	<2.0	0.62	.	<0.01	0.26
L 170009BB	160.	<0.02	<2.0	0.62	.	<0.01	0.25
L 170010AA	930.	0.092	20.	0.73	.	0.040	<0.01
L 170010BB	930.	<0.02	22.	0.67	.	<0.01	<0.01
L 170010CC	280.	<0.02	18.	6.1	.	<0.01	0.019
L 170010DD	340.	<0.02	17.	3.8	.	<0.01	0.022
L 170012AA	80.	<0.02	14.	4.6	.	<0.01	0.020
L 170012BB	<10.	<0.02	14.	4.8	.	<0.01	<0.01
L 170013AA	10.	<0.02	<2.0	2.5	.	<0.01	<0.01
L 170013BB	20.	<0.02	<2.0	2.1	.	<0.01	<0.01
L 170014AA	80.	<0.02	13.	1.1	.	<0.01	<0.01
L 170014BB	180.	<0.02	11.	1.2	.	<0.01	<0.01

J.4 Waste Extraction With Step 1 Leachate from Batch Extraction of Shale and Sandstone

A special Step 1 and Step 2 extraction study was performed to evaluate the effect of water passing through an upper layer of soil prior to contact with the waste. The materials used for this experiment included the Alliance AFBC waste and the shale and sandstone disposal media. First, leachate was generated by Step 1 leaching of each of the disposal media. Duplicate portions of the waste were then initially leached (according to Step 1 procedures) for seven days using the disposal media Step 1 leachates. After the seven-day equilibration period, the eluant was removed for analysis and the leached waste samples were carried forward into secondary leaching using additional disposal media Step 1 leachates. This secondary leaching (Step 2) process was repeated seven times.

Like the data presentations of Sections J.1 and J.2, the entire sample sequence is printed for the first few parameters, then restarted for the second set, and so on. However, the order of presentation differs somewhat since a slightly smaller number of determinations were carried out for this special study. The presentation order is as follows:

a. First sequence - Al, As, B, Ba, Be, Ca
b. Second sequence - Cd, Co, Cr, Cu, F, Sp.Cond.
c. Third sequence - Fe, K, Li, Mg, Mn, Mo
d. Fourth sequence - Na, Ni, pH, Si, SO_4, Sr
e. Fifth sequence - TDS, Ti, TIC, TOC, V, Zn.

The code differs somewhat from the convention described in Section J.1 in that the leachates from the disposal media (prior to exposure to the Alliance AFBC waste) have an 'M' instead of an 'L' as the first character.

	AL	B	BA	BE	CL	CA
M 170308A	0439	1.3	0.94	<0.002	58.	1600.
M 170308B	<0.25	0.90	0.78	<0.002	56.	1600.
M 170310A	<0.25	0.68	0.68	<0.002	56.	1600.
M 170310B	<0.25	0.72	0.74	<0.002	55.	1500.
M 271308A	<0.25	0.85	0.75	<0.002	136.	1400.
M 271308B	<0.25	1.2	0.92	<0.002	20.	1400.
M 271310A	<0.25	0.62	0.74	<0.002	19.	1400.
M 271310B	<0.25	0.65	0.60	<0.002	20.	1400.
M 272308A	<0.25	0.69	0.66	<0.002	<2.0	1400.
M 272308B	<0.25	1.1	0.79	<0.002	<2.0	1500.
M 272310A	<0.25	1.0	0.83	<0.002	<2.0	1400.
M 272310B	0.38	1.2	0.77	<0.002	<2.0	1400.
M 273308A	0.31	0.89	0.70	<0.002	<2.0	1400.
M 273308B	0.87	1.4	0.86	<0.002	<2.0	1700.
M 273310A	0.44	1.9	1.0	<0.002	17.	1400.
M 273310B	0.50	0.96	0.60	<0.002	<2.0	1500.
M 274308A	<0.25	0.78	0.67	<0.002	<2.0	1400.
M 274308B	0.64	1.5	0.91	<0.002	<2.0	1400.
M 274310A	0.39	1.1	0.72	<0.002	<2.0	1400.
M 274310B	0.25	1.4	0.91	<0.002	<2.0	1400.
M 275308A	0.95	0.15	0.33	0.0050	<2.0	1400.
M 275308B	0.81	0.46	0.35	0.0070	<2.0	1400.
M 275310A	0.95	0.21	0.31	0.0040	<2.0	1550.
M 275310B	1.1	0422	0.32	0.0050	2.2	1400.
M 276308A	1.5	1.9	0.88	<0.002	<2.0	1300.
M 276308B	1.3	1.9	0.85	<0.002	<2.0	1290.
M 276310A	<0.25	2.2	0.91	<0.002	2.3	1300.
M 276310B	0.80	3.2	1.0	<0.002	<2.0	1600.
M 277308A	1.0	1.7	0.93	<0.002	2.0	1400.
M 277308B	0.49	2.1	0.90	<0.002	<2.0	1340.
M 277310A	1.9	2.1	0.86	<0.002	.	1300.
M 277310B	1.9	2.0	1.0	<0.002	<2.0	1600.
L 271008A	0.55	0.35	0.51	<0.002	<2.0	33.
L 271008B	<0.25	0.64	0.72	<0.002	<2.0	32.
L 271010A	0.43	0.15	0.64	<0.002	<2.0	31.
L 271010B	0.60	1.8	1.2	<0.002	<2.0	31.
L 272008A	0.55	1.2	0.89	<0.002	<2.0	26.
L 272008B	0.42	0.59	0.68	<0.002	<2.0	26.
L 272010A	0.95	1.3	1.0	<0.002	<2.0	27.
L 272010B	0.76	0.46	0.77	<0.002	<2.0	26.
L 273008A	1.8	0.44	0.60	<0.002	<2.0	22.
L 273008B	2.5	1.1	0.77	<0.002	<2.0	22.
L 273010A	0.36	0.56	0.90	<0.002	<2.0	23.
L 273010B	0.88	1.8	1.2	<0.002	<2.0	24.
L 274008A	1.6	0.65	0.63	<0.002	<2.0	21.
L 274008B	2.3	0.53	0.62	<0.002	<2.0	22.
L 274010A	1.2	0.62	0.90	<0.002	<2.0	23.

	AL	B	BA	BE	CL	CA
L 274010B	0.82	0.78	0.88	<0.002	<2.0	22.
L 275008A	1.5	1.0	0.79	<0.002	<2.0	21.
L 275008B	1.7	1.1	0.83	<0.002	<2.0	20.
L 275010A	1.1	1.3	1.1	<0.002	<2.0	20.
L 275010B	0.52	1.2	1.1	<0.002	<2.0	20.
L 276008A	2.4	0.22	0.41	0.0070	<2.0	21.
L 276008B	0.97	0.17	0.39	0.0060	<2.0	21.
L 276010A	1.0	0.16	0.70	<0.002	<2.0	18.
L 276010B	1.0	0.29	0.60	0.0050	<2.0	19.
L 277008A	1.7	1.8	0.82	0.0040	<2.0	20.
L 277008B	2.0	2.0	0.88	<0.002	<2.0	19.
L 277010A	0.97	3.1	1.8	<0.002	<2.0	18.
L 277010B	1.0	3.4	1.8	<0.002	<2.0	19.

	CD	CO	CONDUCTIVITY	CR	CU	F
M 170308A	<0.04	<0.03	9000.	<0.005	<0.005	0.28
M 170308B	<0.04	<0.03	8900.	<0.005	<0.005	0.32
M 170310A	<0.04	<0.03	8900.	0.0060	<0.005	0.30
M 170310B	<0.04	<0.03	9000.	<0.005	<0.005	0.23
M 271308A	<0.04	<0.03	8300.	<0.005	<0.005	0.22
M 271308B	<0.04	<0.03	8200.	<0.005	<0.005	0.20
M 271310A	<0.04	<0.03	8400.	0.0050	<0.005	0.27
M 271310B	<0.04	<0.03	8300.	<0.005	<0.005	0.27
M 272308A	<0.04	<0.03	7800.	<0.005	<0.005	0.24
M 272308B	<0.04	<0.03	8000.	0.027	<0.005	0.20
M 272310A	<0.04	<0.03	8000.	<0.005	<0.005	0.14
M 272310B	<0.04	<0.03	8100.	0.015	<0.005	0.18
M 273308A	<0.04	<0.03	8000.	0.027	<0.005	0.12
M 273308B	<0.04	<0.03	7600.	0.044	0.013	0.17
M 273310A	<0.04	<0.03	7900.	0.017	<0.005	0.19
M 273310B	<0.04	<0.03	7900.	0.068	0.057	0.21
M 274308A	<0.04	<0.03	7500.	0.024	<0.005	0.19
M 274308B	<0.04	<0.03	7300.	0.030	<0.005	0.19
M 274310A	<0.04	<0.03	7300.	0.012	<0.005	0.19
M 274310B	<0.04	<0.03	7800.	0.017	<0.005	0.19
M 275308A	<0.04	0.040	7500.	0.061	0.045	0.11
M 275308B	<0.04	<0.03	7300.	0.059	0.039	0.20
M 275310A	<0.04	<0.03	7600.	0.050	0.043	0.17
M 275310B	<0.04	<0.03	7200.	0.060	0.043	0.18
M 276308A	<0.01	<0.03	7600.	<0.005	<0.005	0.20
M 276308B	<0.01	<0.03	7590.	<0.005	<0.005	0.19
M 276310A	<0.01	<0.03	7700.	<0.005	<0.005	0.18
M 276310B	<0.002	<0.03	7500.	0.014	0.0090	0.17
M 277308A	<0.01	<0.03	7600.	<0.005	<0.005	0.23
M 277308B	<0.01	<0.03	7080.	<0.005	<0.005	0.18
M 277310A	<0.01	<0.03	7600.	<0.005	<0.005	0.21
M 277310B	<0.01	<0.03	7600.	<0.005	<0.005	0.19
L 271008A	<0.04	<0.03	210.	<0.005	<0.005	0.34
L 271008B	<0.04	<0.03	190.	<0.005	<0.005	0.37
L 271010A	<0.04	<0.03	240.	<0.005	<0.005	0.29
L 271010B	<0.04	<0.03	240.	<0.005	<0.005	0.24
L 272008A	<0.04	<0.03	150.	<0.005	<0.005	0.32
L 272008B	<0.04	<0.03	150.	<0.005	<0.005	0.29
L 272010A	<0.04	<0.03	180.	<0.005	<0.005	0.20
L 272010B	<0.04	<0.03	180.	<0.005	<0.005	0.20
L 273008A	<0.04	<0.03	140.	<0.005	<0.005	0.23
L 273008B	<0.04	<0.03	140.	0.046	0.060	0.22
L 273010A	<0.04	<0.03	200.	<0.005	<0.005	0.15
L 273010B	<0.04	<0.03	180.	<0.005	0.0070	0.17
L 274008A	<0.04	<0.03	150.	0.013	0.013	0.19
L 274008B	<0.04	<0.03	130.	<0.005	<0.005	0.13
L 274010A	<0.04	<0.03	170.	0.017	0.015	0.10

	CD	CO	CONDUCTIVITY	CR	CU	F
L 274010B	<0.04	<0.03	180.	<0.005	<0.005	0.12
L 275008A	<0.04	<0.03	180.	0.014	0.015	0.18
L 275008B	<0.04	<0.03	110.	0.010	0.015	0.14
L 275020A	<0.04	<0.03	150.	<0.005	<0.005	0.14
L 275010B	<0.04	<0.03	140.	0.013	<0.005	0.13
L 276008A	<0.04	0.033	120.	0.030	0.030	0.14
L 276008B	<0.04	<0.03	120.	0.024	0.011	0.13
L 276020A	<0.04	<0.03	150.	0.015	0.030	0.15
L 276010B	<0.04	0.048	150.	0.049	0.061	0.16
L 277008A	<0.01	<0.03	130.	0.0090	0.0090	0.13
L 277008B	<0.01	<0.03	120.	<0.005	<0.005	0.11
L 277020A	<0.01	<0.03	120.	<0.005	<0.005	0.12
L 277010B	<0.01	<0.03	130.	<0.005	<0.005	0.11

	FE	K	LI	MG	MN	MO
M 170308A	<0.04	57.	0.34	0.20	<0.006	0.36
M 170308B	<0.04	56.	0.33	<0.17	<0.006	0.36
M 170310A	<0.04	65.	0.38	0.18	<0.006	0.39
M 170310B	<0.04	61.	0.36	0.21	<0.006	0.34
M 271308A	<0.04	43.	0.20	<0.17	<0.006	0.22
M 271308B	<0.04	43.	0.19	<0.17	<0.006	0.21
M 271310A	<0.04	49.	0.22	<0.17	<0.006	0.21
M 271310B	<0.04	51.	0.21	0.22	<0.006	0.20
M 272308A	<0.04	25.	0.074	<0.17	<0.006	0.098
M 272308B	<0.04	28.	0.083	0.36	0.0060	0.12
M 272310A	0.17	29.	0.058	<0.17	<0.006	0.087
M 272310B	<0.04	31.	0.11	0.33	0.0060	0.15
M 273308A	<0.04	19.	0.047	0.31	<0.006	0.089
M 273308B	0.056	22.	0.058	0.32	<0.006	0.11
M 273310A	<0.04	23.	0.044	0.33	<0.006	0.071
M 273310B	<0.04	25.	0.100	0.53	0.0090	0.12
M 274308A	<0.04	14.	0.0040	0.24	<0.006	0.066
M 274308B	<0.04	15.	0.017	0.32	0.0070	0.044
M 274310A	<0.04	19.	0.022	0.19	<0.006	0.041
M 274310B	<0.04	19.	0.015	0.28	<0.006	0.044
M 275308A	0.050	14.	0.047	0.60	<0.006	<0.010
M 275308B	<0.03	15.	0.057	0.56	<0.006	<0.010
M 275310A	<0.04	21.	0.054	0.71	<0.006	<0.010
M 275310B	<0.04	23.	0.060	0.71	0.0060	<0.010
M 276308A	<0.04	9.0	<0.002	<0.17	0.18	<0.010
M 276308B	<0.04	8.8	<0.002	<0.17	0.18	<0.010
M 276310A	<0.04	14.	<0.002	<0.17	<0.006	0.012
M 276310B	<0.04	19.	0.038	0.30	0.0080	0.0060
M 277308A	<0.04	7.4	<0.002	<0.17	0.18	<0.010
M 277308B	<0.04	8.7	<0.002	<0.17	<0.006	<0.010
M 277310A	<0.04	13.	<0.002	<0.17	0.19	<0.010
M 277310B	<0.04	15.	<0.002	<0.17	0.18	<0.010
L 271008A	<0.04	3.7	<0.002	4.1	0.050	<0.010
L 271008B	<0.04	3.2	<0.002	3.9	0.047	<0.010
L 271010A	<0.04	6.8	<0.002	8.6	0.19	<0.010
L 271010B	<0.04	7.2	<0.002	8.2	0.18	<0.010
L 272008A	<0.04	1.9	<0.002	2.8	0.029	<0.010
L 272008B	<0.04	2.3	<0.002	2.9	0.030	<0.010
L 272010A	0.12	4.5	<0.002	7.1	0.14	<0.010
L 272010B	0.065	4.2	<0.002	7.0	0.12	<0.010
L 273008A	0.53	1.9	<0.002	2.2	<0.006	<0.010
L 273008B	0.52	3.4	0.029	2.8	<0.006	0.023
L 273010A	<0.04	2.5	<0.002	6.2	0.16	<0.010
L 273010B	0.048	4.2	<0.002	6.4	0.12	<0.010
L 274008A	0.37	2.8	<0.002	2.4	<0.006	<0.010
L 274008B	0.57	1.9	<0.002	2.3	<0.006	<0.010
L 274010A	0.050	3.8	<0.002	6.4	0.16	<0.010

	FE	K	LI	MG	MN	MO
L 274020B	0.040	3.1	<0.002	6.1	0.14	0.011
L 275008A	0.16	1.7	0.0070	2.3	<0.006	0.015
L 275008B	0.33	1.8	<0.002	2.3	<0.006	<0.01
L 275020A	0.045	2.6	<0.002	5.7	0.16	<0.01
L 275020B	<0.04	3.6	<0.002	5.7	0.20	0.017
L 276008A	0.68	1.9	0.027	2.7	<0.006	<0.01
L 276008B	0.060	2.3	0.0070	2.6	<0.006	<0.01
L 276020A	0.046	4.0	<0.002	6.0	0.18	<0.01
L 276020B	<0.03	5.3	0.058	6.6	0.23	<0.01
L 277008A	0.12	2.5	0.045	2.2	0.030	0.033
L 277008B	0.26	1.9	0.040	2.1	0.031	<0.01
L 277020A	<0.04	2.2	<0.002	5.3	0.44	<0.01
L 277020B	<0.04	4.1	<0.002	6.0	0.51	<0.01

	NA	NI	PH	SI	SO4	SR
M 170308A	18.	<0.01	12.	1.4	1300.	21.
M 170308B	17.	<0.01	12.	0.84	1340.	21.
M 170310A	18.	<0.01	12.	1.6	1480.	22.
M 170310B	17.	<0.01	12.	0.79	1390.	21.
M 271308A	11[illegible]	<0.01	12.	0.62	1160.	15.
M 271308B	12.	<0.01	12.	0.44	1160.	17.
M 271310A	11.	<0.01	12.	0.65	1160.	15.
M 271310B	12.	<0.01	12.	0.40	1130.	13.
M 272308A	5.9	<0.01	12.	0.27	1120.	5.7
M 272308B	6.7	<0.01	12.	0.22	1120.	6.0
M 272310A	5.6	<0.01	12.	0.65	1140.	5.7
M 272310B	6.8	0.030	12.	0.28	1140.	5.2
M 273308A	4.4	<0.01	12.	0.22	1140.	3.2
M 273308B	5.2	<0.01	12.	0.38	1100.	3.8
M 273310A	5.8	<0.01	12.	0.42	1140.	3.1
M 273310B	4.6	0.026	12.	0.25	1190.	3.3
M 274308A	3.3	<0.01	12.	0.18	1080.	2.3
M 274308B	4.5	0.017	12.	0.19	1160.	2.3
M 274310A	3.4	<0.01	12.	0.19	.	2.3
M 274310B	4.3	<0.01	12.	0.17	1080.	2.5
M 275308A	3.3	<0.01	12.	<0.08	1130.	1.7
M 275308B	4.1	0.019	12.	<0.08	1180.	1.7
M 275310A	4.5	<0.01	12.	<0.08	1120.	1.8
M 275310B	4.5	<0.01	12.	<0.08	1120.	1.9
M 276308A	3.7	<0.01	12.	0.22	1080.	1.6
M 276308B	3.0	<0.01	12.	0.15	1100.	1.4
M 276310A	4.6	<0.01	12.	0.39	1110.	1.5
M 276310B	3.5	<0.01	12.	0.64	1140.	2.1
M 277308A	2.9	<0.01	12.	0.14	1150.	1.5
M 277308B	4.5	<0.01	12.	0.37	1140.	1.3
M 277310A	4.0	<0.01	12.	0.34	1130.	1.3
M 277310B	6.2	<0.01	12.	0.35	1140.	1.9
L 271008A	0.057	0.039	8.2	2.2	17.	0.085
L 271008B	0.70	<0.01	8.2	2.2	16.	0.085
L 271010A	1.1	0.020	8.1	3.1	44.	0.098
L 271010B	2.2	0.033	8.1	3.2	44.	0.100
L 272008A	0.86	<0.01	7.9	1.8	13.	0.073
L 272008B	0.74	0.020	8.0	1.9	12.	0.070
L 272010A	0.90	<0.01	7.9	2.8	30.	0.093
L 272010B	<0.02	0.024	8.0	2.7	31.	0.083
L 273008A	0.29	<0.01	8.0	2.9	11.	0.059
L 273008B	1.1	0.057	8.0	2.9	11.	0.069
L 273010A	0.21	0.017	7.8	2.4	24.	0.076
L 273010B	1.4	0.042	8.0	2.6	24.	0.087
L 274008A	0.70	0.025	8.4	2.3	10.	0.058
L 274008B	0.63	0.045	8.5	2.9	10.	0.054
L 274010A	0.51	0.054	7.9	2.3	25.	0.077

	NA	NI	PH	SI	SO4	SR
L 274020B	0.87	0.018	7.8	2.3	2.4	0.075
L 275008A	0.98	0.056	8.3	1.6	1.1	0.059
L 275008B	1.2	0.035	8.1	2.0	1.2	0.059
L 275020A	1.1	0.024	7.9	2.3	2.2	0.072
L 275020B	1.5	0.027	8.4	2.2	2.1	0.075
L 276008A	1.7	<0.01	7.6	2.9	1.0	0.023
L 276008B	1.9	<0.01	7.6	0.88	1.0	0.022
L 276020A	1.3	<0.01	7.8	2.3	2.3	0.037
L 276020B	2.5	0.059	7.7	2.6	2.6	0.044
L 277008A	2.2	<0.01	8.6	1.6	1.0	0.060
L 277008B	2.7	<0.01	8.7	2.0	1.0	0.059
L 277020A	4.3	<0.01	8.8	4.8	2.5	0.064
L 277010B	4.6	<0.01	8.8	4.9	2.8	0.081

	TDS	TI	TIC	TOC	V	ZN
M 170308A	4430.	<0.02	2.2	5.6	<0.01	0.015
M 170308B	4570.	<0.02	<2.0	1.9	<0.01	<0.01
M 170310A	4610.	<0.02	<2.0	1.9	<0.01	<0.01
M 170310B	4440.	<0.02	<2.0	1.6	<0.01	<0.01
M 271308A	3990.	<0.02	<2.0	2.8	<0.01	<0.01
M 271308B	3730.	<0.02	<2.0	2.4	<0.01	<0.01
M 271310A	3800.	<0.02	<2.0	1.8	<0.01	<0.01
M 271310B	3940.	<0.02	<2.0	1.7	<0.01	<0.01
M 272308A	3710.	<0.02	<2.0	12.	<0.01	<0.01
M 272308B	3730.	<0.25	<2.0	2.8	<0.01	0.15
M 272310A	3570.	<0.02	<2.0	2.6	<0.01	<0.01
M 272310B	3850.	<0.02	<2.0	2.5	<0.01	<0.01
M 273308A	3620.	<0.02	<2.0	•	<0.01	<0.01
M 273308B	3540.	<0.02	<2.0	•	<0.01	<0.01
M 273310A	3570.	<0.02	<2.0	•	<0.01	<0.01
M 273310B	3660.	0.088	<2.0	•	<0.01	<0.01
M 274308A	3810.	<0.02	<2.0	•	<0.01	<0.01
M 274308B	3830.	<0.02	<2.0	•	<0.01	<0.01
M 274310A	3900.	<0.02	<2.0	•	<0.01	<0.01
M 274310B	3780.	<0.02	<2.0	•	<0.01	<0.01
M 275308A	3440.	0.047	<2.0	•	0.18	<0.01
M 275308B	3500.	0.049	<2.0	•	0.15	<0.01
M 275310A	3500.	<0.02	<2.0	•	0.18	<0.01
M 275310B	3420.	<0.02	<2.0	•	0.18	<0.01
M 276308A	3500.	<0.02	<2.0	•	<0.01	<0.01
M 276308B	3570.	<0.02	<2.0	•	<0.01	<0.01
M 276310A	3510.	<0.02	<2.0	•	<0.01	<0.01
M 276310B	3510.	0.050	<2.0	•	<0.01	<0.01
M 277308A	3590.	<0.02	<2.0	•	<0.01	<0.01
M 277308B	3660.	<0.02	<2.0	•	<0.01	<0.01
M 277310A	3550.	<0.02	<2.0	•	<0.01	<0.01
M 277310B	3620.	<0.02	<2.0	•	<0.01	<0.01
L 271008A	185.	<0.02	16.	•	<0.01	<0.01
L 271008B	180.	<0.02	13.	•	<0.01	<0.01
L 271010A	300.	<0.02	14.	•	<0.01	<0.01
L 271010B	335.	<0.02	14.	•	<0.01	<0.01
L 272008A	165.	<0.02	12.	•	<0.01	<0.01
L 272008B	135.	<0.02	9.4	•	<0.01	<0.01
L 272010A	520.	<0.02	11.	•	<0.01	<0.01
L 272010B	305.	<0.02	11.	•	<0.01	<0.01
L 273008A	135.	<0.02	9.4	3.1	<0.01	<0.01
L 273008B	140.	0.094	9.6	3.1	<0.01	0.016
L 273010A	240.	<0.02	9.4	1.5	<0.01	<0.01
L 273010B	245.	<0.02	7.8	9.4	<0.01	0.015
L 274008A	100.	<0.02	8.6	2.0	<0.01	<0.01
L 274008B	105.	<0.02	9.3	2.7	<0.01	<0.01
L 274010A	125.	<0.02	12.	1.8	<0.01	<0.01

	TDS	TI	TIC	TOC	V	ZN
L 274010B	120.	<0.02	12.	1.3	<0.01	<0.01
L 27500BA	150.	<0.02	9.0	2.7	<0.01	<0.01
L 275008B	145.	<0.02	8.0	3.5	<0.01	<0.01
L 275010A	200.	<0.02	10.	2.0	<0.01	<0.01
L 275010B	145.	<0.02	10.	1.7	<0.01	<0.01
L 27600BA	145.	0.037	8.2	3.1	0.022	<0.01
L 276008B	65.	<0.02	8.7	2.0	0.11	<0.01
L 276010A	85.	<0.02	9.3	1.0	0.11	<0.01
L 276010B	70.	0.086	9.1	1.2	0.20	<0.01
L 27700BA	50.	0.11	9.0	•	0.021	<0.01
L 27700BB	35.	<0.02	8.8	•	<0.01	<0.01
L 277010A	55.	<0.02	5.9	•	<0.01	<0.01
L 277010B	20.	<0.02	6.4	•	<0.01	<0.01

J.5 Reproducibility Investigation of Protocol Step 1 Extraction

A sample "representativeness" investigation was performed to evaluate the cause of variability observed in the data for the Step 1 leachates from the Exxon PFBC and Alliance AFBC wastes. The experiment was designed to determine if the observed variability was due to inhomogeneity of the solids, nonduplication in the batch extractions, or variation in accuracy of the analyses from day to day.

Alliance AFBC waste was used for the representativeness study. Approximately 10 kg of the waste was remixed, and five individual subsets of about 250 g each were removed. The subsets were labeled A through E. Each subset was thoroughly mixed and divided into four components. Two of the components were used for protocol Step 1, seven-day extractions. The duplicate extractions were labeled X and Y and were performed using a solid:liquid ratio of 50 g to 150 mL. At the end of the seven-day period, the X extractions were each divided into four portions which were individually analyzed at one-month intervals.

The coding for this investigation differs from the preceding sections. Analysis identification, protocol step, number of days leached, substep index, and waste type are the same for all samples: the analysis identification indicates a leachate analysis; the protocol step is one; the leaching time is seven days; and no substeps performed. Waste three (Alliance AFBC) is used exclusively. Following the waste type is a solids code (A-E) used to identify the five samples of Alliance AFBC waste followed by an analysis replication code (X or Y).

Note that the X samples were analyzed on four successive days while the Y samples were analyzed on day one only. Additionally, a sixth set of samples were analyzed on four consecutive days to compare the effects of filtering the leachate, denoted by labelling the sample 'F*' for a filtered sample and 'U*' for an unfiltered sample. The asterisk indicates that the sample analyzed is a composite.

The order of variable presentation is the same as in preceding sections. The same notations made in Section J.2 regarding order of presentation, detection limits, accuracy, and units apply to the data in this section.

	AL	B	BA	BE	CL	CA
L 1703AX-1	2.0	0.24	0.39	0.0030	58.	1700.
L 1703AX-2	1.0	0.20	0.39	0.0050	50.	1500.
L 1703AX-3	1.9	0.29	0.41	0.0060	50.	1600.
L 1703AX-4	0.93	0.28	0.43	<0.002	52.	1500.
L 1703AY-1	2.1	0.88	0.41	0.0040	57.	1700.
L 1703BX-1	0.82	0.18	0.33	0.010	59.	1700.
L 1703BX-2	0.63	0.23	0.33	<0.002	51.	1600.
L 1703BX-3	0.98	0.27	0.58	0.013	49.	1700.
L 1703BX-4	0.81	0.21	0.47	0.0040	51.	1600.
L 1703BY-1	0.66	0.40	0.42	0.010	49.	1700.
L 1703CX-1	<0.25	0.090	0.40	0.0050	57.	1500.
L 1703CX-2	<0.25	<0.05	0.31	0.010	53.	1500.
L 1703CX-3	0.58	0.13	0.50	0.0030	49.	1410.
L 1703CX-4	0.45	0.080	0.49	0.0050	50.	1400.
L 1703CY-1	<0.25	<0.05	0.40	0.010	57.	1600.
L 1703DX-1	0.91	0.28	0.38	0.010	59.	1600.
L 1703DX-2	0.97	0.30	0.42	0.0050	48.	1600.
L 1703DX-3	1.0	0.37	0.45	0.0030	59.	1300.
L 1703DX-4	1.0	0.35	0.39	0.0070	50.	1500.
L 1703DY-1	0.59	0.30	0.41	0.010	58.	2000.
L 1703EX-1	0.92	0.30	0.37	0.010	59.	1800.
L 1703EX-2	0.82	0.50	0.43	0.0060	49.	1600.
L 1703EX-3	0.92	0.50	0.54	<0.002	49.	1610.
L 1703EX-4	1.2	0.30	0.43	0.0070	50.	1500.
L 1703EY-1	0.60	0.30	0.42	0.010	57.	1800.
L 170300-1F*	2.0	0.32	0.38	0.0040	59.	1600.
L 170300-1U*	2.0	0.22	0.38	0.0040	57.	1700.
L 170300-2F*	2.1	0.22	0.42	0.0030	50.	1500.
L 170300-2U*	2.0	0.21	0.38	0.0020	51.	1600.
L 170300-3F*	2.3	0.27	0.38	0.0050	48.	1700.
L 170300-3U*	2.0	0.25	0.35	0.0030	50.	1600.
L 170300-4F*	0.43	0.30	0.78	0.0060	50.	1400.
L 170300-4U*	0.43	0.31	0.79	0.0020	50.	1400.

	CD	CO	CONDUCTIVITY	CR	CU	F
L 1703AX-1	<0.04	<0.03	8000.	0.026	0.031	0.20
L 1703AX-2	<0.04	<0.03	7000.	0.035	0.027	0.16
L 1703AX-3	<0.04	<0.03	3700.	0.035	0.026	0.090
L 1703AX-4	<0.04	<0.03	7100.	0.030	0.050	0.15
L 1703AY-1	<0.04	<0.03	7800.	0.028	0.031	0.15
L 1703BX-1	<0.04	<0.03	6800.	0.020	0.018	0.060
L 1703BX-2	<0.04	<0.03	6100.	0.047	0.018	0.10
L 1703BX-3	<0.04	<0.03	6800.	0.051	0.026	0.30
L 1703BX-4	<0.04	<0.03	7000.	0.045	0.036	0.15
L 1703BY-1	<0.03	<0.03	6800.	0.060	0.021	0.15
L 1703CX-1	<0.04	<0.03	8000.	<0.005	<0.005	0.25
L 1703CX-2	0.040	<0.03	6900.	<0.005	<0.005	0.080
L 1703CX-3	<0.04	<0.03	7800.	<0.005	<0.005	0.31
L 1703CX-4	<0.04	0.030	7400.	0.0090	0.0060	0.15
L 1703CY-1	<0.03	<0.03	7800.	<0.005	<0.005	0.26
L 1703DX-1	<0.04	<0.03	8000.	<0.005	<0.005	0.17
L 1703DX-2	<0.04	<0.03	7000.	0.040	0.016	0.22
L 1703DX-3	<0.04	<0.03	7800.	<0.005	0.015	0.36
L 1703DX-4	<0.04	0.030	9300.	0.015	0.020	0.31
L 1703DY-1	<0.04	<0.03	7800.	<0.005	0.016	0.12
L 1703EX-1	<0.04	<0.03	8100.	0.060	0.020	0.16
L 1703EX-2	<0.04	<0.03	7500.	0.070	0.016	0.19
L 1703EX-3	<0.04	<0.03	7700.	0.072	0.026	0.35
L 1703EX-4	<0.04	<0.03	8800.	0.090	0.016	0.24
L 1703EY-1	<0.04	<0.03	8200.	0.050	0.022	0.26
L 170300-1F*	<0.04	<0.03	7600.	0.040	0.027	0.090
L 170300-1U*	<0.04	<0.03	8000.	0.030	0.027	0.17
L 170300-2F*	<0.04	<0.03	7000.	0.031	0.031	<0.05
L 170300-2U*	<0.04	<0.03	6000.	0.029	0.029	0.070
L 170300-3F*	<0.04	<0.03	6600.	0.027	0.035	0.22
L 170300-3U*	<0.04	<0.03	7100.	0.027	0.028	0.20
L 170300-4F*	<0.04	<0.03	3700.	0.043	0.014	0.15
L 170300-4U*	<0.04	<0.03	6100.	0.051	0.038	0.16

	FE	K	LI	MG	MN	MO
L 1703AX-1	0.10	67.	0.60	1.0	<0.005	0.25
L 1703AX-2	0.11	56.	0.41	0.86	<0.005	0.25
L 1703AX-3	0.17	59.	0.49	1.2	<0.005	0.24
L 1703AX-4	0.091	52.	0.46	0.91	<0.006	0.24
L 1703AY-1	0.11	67.	0.60	1.2	<0.006	0.28
L 1703BX-1	<0.05	60.	0.42	0.28	<0.005	0.25
L 1703BX-2	<0.05	56.	0.42	0.59	<0.005	0.24
L 1703BX-3	<0.05	61.	0.69	0.38	<0.005	0.36
L 1703BX-4	<0.03	50.	0.35	0.26	<0.006	0.36
L 1703BY-1	0.060	62.	0.58	0.80	<0.005	0.20
L 1703CX-1	<0.04	60.	0.36	0.38	<0.005	0.42
L 1703CX-2	<0.04	49.	0.31	0.35	0.0050	0.48
L 1703CX-3	<0.04	53.	0.35	0.43	<0.005	0.49
L 1703CX-4	0.054	52.	0.44	0.79	<0.006	0.43
L 1703CY-1	<0.04	56.	0.37	0.35	<0.005	0.60
L 1703DX-1	<0.04	56.	0.32	0.68	<0.005	0.29
L 1703DX-2	<0.04	57.	0.42	0.74	<0.005	0.28
L 1703DX-3	0.10	42.	0.38	0.59	<0.005	0.36
L 1703DX-4	0.094	53.	0.52	0.80	<0.006	0.48
L 1703DY-1	<0.04	60.	0.38	0.70	<0.005	0.36
L 1703EX-1	<0.04	67.	0.48	0.60	<0.005	0.27
L 1703EX-2	<0.04	61.	0.46	0.61	<0.005	0.32
L 1703EX-3	0.10	55.	0.54	0.59	<0.005	0.47
L 1703EX-4	0.069	55.	0.48	0.58	<0.006	0.44
L 1703EY-1	<0.04	69.	0.45	0.63	<0.005	0.24
L 170300-1F*	0.20	55.	0.41	0.98	<0.005	0.24
L 170300-1U*	0.12	56.	0.49	1.0	<0.005	0.24
L 170300-2F*	0.14	58.	0.48	1.2	<0.005	0.23
L 170300-2U*	0.13	60.	0.48	1.1	<0.005	0.23
L 170300-3F*	0.14	68.	0.46	1.2	<0.005	0.21
L 170300-3U*	0.12	63.	0.48	0.95	<0.005	0.21
L 170300-4F*	0.045	50.	0.38	0.43	<0.006	0.38
L 170300-4U*	0.061	49.	0.35	0.31	<0.006	0.37

	NA	NI	PH	SI	SO4	SR
L 1703AX-1	22.	<0.01	12.	<0.12	1600.	24.
L 1703AX-2	18.	<0.01	12.	<0.12	1380.	21.
L 1703AX-3	18.	<0.01	8.1	<0.12	1380.	21.
L 1703AX-4	18.	<0.01	12.	0.54	1380.	22.
L 1703AY-1	22.	<0.01	12.	<0.12	1540.	25.
L 1703BX-1	19.	<0.01	12.	<0.12	1570.	23.
L 1703BX-2	17.	<0.01	12.	<0.12	1460.	22.
L 1703BX-3	20.	<0.01	12.	<0.12	1440.	20.
L 1703BX-4	16.	<0.01	12.	0.28	1350.	21.
L 1703BY-1	20.	<0.01	12.	<0.12	1270.	26.
L 1703CX-1	20.	<0.01	12.	<0.12	1410.	21.
L 1703CX-2	17.	<0.01	12.	<0.12	1370.	20.
L 1703CX-3	17.	<0.01	12.	<0.12	1340.	19.
L 1703CX-4	17.	<0.01	12.	0.19	1340.	22.
L 1703CY-1	19.	<0.01	12.	<0.12	1530.	22.
L 1703DX-1	18.	<0.01	12.	<0.12	1480.	23.
L 1703DX-2	19.	<0.01	12.	<0.12	1190.	22.
L 1703DX-3	13.	<0.01	12.	<0.12	1220.	17.
L 1703DX-4	18.	<0.01	12.	0.14	1350.	21.
L 1703DY-1	20.	<0.01	12.	<0.12	1440.	28.
L 1703EX-1	21.	<0.01	12.	<0.12	1480.	23.
L 1703EX-2	20.	<0.01	12.	<0.12	1220.	22.
L 1703EX-3	18.	<0.01	12.	<0.12	1220.	21.
L 1703EX-4	18.	<0.01	12.	<0.12	1150.	22.
L 1703EY-1	25.	<0.01	12.	<0.12	1520.	18.
L 170300-1F*	22.	<0.01	12.	0.12	1500.	22.
L 170300-1U*	23.	<0.01	12.	0.12	1500.	24.
L 170300-2F*	24.	<0.01	12.	0.12	1430.	23.
L 170300-2U*	21.	<0.01	12.	0.13	1420.	24.
L 170300-3F*	25.	<0.01	12.	0.13	1440.	23.
L 170300-3U*	23.	<0.01	12.	0.15	1310.	24.
L 170300-4F*	17.	<0.01	12.	0.36	1460.	21.
L 170300-4U*	16.	<0.01	12.	0.38	1400.	21.

	TDS	TI	TIC	TOC	V	ZN
L 1703AX-1	4100.	<0.02	<2.0	3.0	0.10	<0.01
L 1703AX-2	3800.	<0.02	<2.0	•	0.13	<0.01
L 1703AX-3	3300.	<0.02	1.2	•	0.13	0.030
L 1703AX-4	4100.	<0.02	<2.0	•	0.13	0.035
L 1703AY-1	4200.	<0.02	2.2	4.5	0.13	<0.01
L 1703BX-1	4200.	<0.02	<2.0	1.6	0.15	<0.01
L 1703BX-2	3700.	0.040	1.4	1.3	0.16	<0.01
L 1703BX-3	2800.	<0.02	2.9	•	0.098	<0.01
L 1703BX-4	3700.	<0.02	<2.0	•	0.092	0.017
L 1703BY-1	3800.	<0.02	<2.0	1.3	0.15	<0.01
L 1703CX-1	4000.	<0.02	<2.0	1.2	<0.01	<0.01
L 1703CX-2	3600.	<0.02	<2.0	3.6	<0.01	<0.01
L 1703CX-3	3900.	<0.02	2.5	•	<0.01	0.030
L 1703CX-4	3900.	<0.02	<2.0	•	<0.01	0.036
L 1703CY-1	4400.	<0.02	<2.0	1.6	<0.01	<0.01
L 1703DX-1	4200.	<0.02	<2.0	1.1	0.18	<0.01
L 1703DX-2	3500.	<0.02	<2.0	2.4	0.18	<0.01
L 1703DX-3	3600.	<0.02	<2.0	•	0.15	<0.01
L 1703DX-4	4100.	0.025	<2.0	•	0.18	0.015
L 1703DY-1	4100.	<0.02	3.0	2.9	0.17	<0.01
L 1703EX-1	4200.	<0.02	<2.0	1.3	0.16	<0.01
L 1703EX-2	3600.	<0.02	2.9	0.60	0.14	<0.01
L 1703EX-3	3700.	<0.02	<2.0	•	0.15	0.017
L 1703EX-4	4000.	0.025	<2.0	•	0.29	0.034
L 1703EY-1	4100.	<0.02	3.6	1.9	0.15	<0.01
L 170300-1F*	4100.	<0.02	<2.0	3.3	0.13	<0.01
L 170300-1U*	4200.	<0.02	<2.0	1.0	0.13	<0.01
L 170300-2F*	3900.	<0.02	<2.0	•	0.14	<0.01
L 170300-2U*	3500.	<0.02	<2.0	1.0	0.13	<0.01
L 170300-3F*	3500.	<0.02	<2.0	•	0.14	<0.01
L 170300-3U*	3300.	<0.02	<2.0	•	0.15	<0.01
L 170300-4F*	3300.	<0.02	<2.0	•	0.060	0.030
L 170300-4U*	2900.	<0.02	<2.0	•	0.069	0.026

J.6 RCRA Extraction Procedure Testing of FBC Wastes

The Extraction Procedure (EP) toxicity test was determined for unground samples of Exxon PFBC, Alliance AFBC, and Georgetown AFBC wastes by performance of the EP as stipulated by EPA regulations (46 FR 35247, July 7, 1981). These determinations were performed in duplicate for each waste.

In this test, a representative 100 g sample of each waste was extracted with 1.6 liters of distilled water with an initial pH adjustment requiring the maximum allowable acid addition of 400 mL of 0.5 N acetic acid. After 24 hours of mechanical stirring at a controlled constant rate, the suspension was filtered, diluted to 2.0 liters and the filtrate was analyzed for the same chemical apecies as the batch protocol leachates.

The sample code begins with 'RCRA' to indicate type of analysis, followed by a one for Exxon PFBC waste, a three for Alliance AFBC waste, or a four for Georgetown AFBC waste. The 1, 3, or 4 is followed by an 'A' or a 'B' to indicate replicate analyses. The parameters Ag, As, Ba, Cd, Cr, Hg, Pb, and Se, were determined by AAS. Other parameters were determined by ICAPES.

SAMPLE	(1) RCRA1 A	(2) RCRA1 B	(3) RCRA3 A	(4) RCRA3 B	(5) RCRA4 A	(6) RCRA4 B
AG	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
AL	<0.05	<0.05	1.7	1.7	<0.05	<0.05
AS	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
B	9.8	9.9	0.050	0.030	<0.01	<0.01
BA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CA	2700.	2600.	4000.	3900.	.	2600.
CD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
CL	440.	420.	350.	400.	390.	400.
CO	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
CONDUCTIVITY	7600.	7600.	13000.	13000.	13000.	13000.
CR	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
CU	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
F	0.29	0.36	0.48	0.46	0.38	0.36
FE	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
HG	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
K	76.	73.	4.4	4.5	1.3	1.5
LI	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MG	420.	418.	<0.03	<0.03	0.067	0.076
MN	<0.001	0.0020	<0.001	<0.001	<0.001	<0.001
MO	0.086	0.10	0.17	0.16	0.0060	0.0070
NA	4.7	4.6	1.7	1.9	0.56	0.75
NI	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PB	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
PH	10.	9.8	12.	12.	12.	12.
SE	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
SI	0.26	0.23	0.14	.	0.24	0.22
SO4	1600.	1600.	1400.	1300.	870.	1200.
SR	0.84	0.83	8.0	8.0	4.9	4.9
TDS	11000.	11000.	12000.	12000.	12000.	12000.
TI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
V	0.036	0.026	<0.003	<0.003	<0.003	<0.003
ZN	0.010	0.0060	<0.003	<0.003	<0.003	<0.003

J.7 Batch Equilibration Studies of Attenuation/Mobilization: Protocol Steps 4, 5, and 6

Protocol Steps 4, 5, and 6 involve exposure of samples of the disposal media to leachate generated in Step 1. Step 4 consists of "primary" attenuation, in that the Step 1 leachate is first exposed to fresh disposal medium. Step 5 involves repeated exposure of the same sample of disposal medium to fresh Step 1 leachate. Step 6 comprises repeated exposure of leachate from Step 4 to fresh samples of disposal medium.

Table J-2 presents the total attenuation/mobilization matrix for each of the three FBC wastes. Full Step 4, 5 and 6 attenuation studies were conducted on the Exxon PFBC and Alliance AFBC wastes. For the Georgetown AFBC waste Step 4 was carried out. Examination of the results from the first two wastes led to the decision to perform only the first step in the attenuation sequence on the Georgetown waste.

The same convention described for protocol Steps 1, 2, and 3 in section J.1 was used for the data for Steps 4, 5, and 6. The order in which the symbolism fits together is A, b, c, d, e, f, g. These characters are defined as follows:

A The first character of the code is a letter identification of the sample type, as follows:

- S Denotes a solid FBC waste.
- A Denotes a solid disposal medivm.
- L Denotes a liquid phase (leachate) from a laboratory extraction step involving leaching and/or attenuation.

b Identifies the specific step in the protocol (b - 3 through 7),

c Denotes the time period for a particular extraction (c = 1, 2, or 7 for 1 day, 2 days, or 7 days of extraction, respectively),

d Denotes the number of times a secondary leaching or attenuation step has been repeated. (d = 0 through 9; 0 is used in Steps 1 and 4 which are not repeated.)

TABLE J-2. SUMMARY OF ATTENUATION/MOBILIZATION STUDIES FOR THE THREE FBC WASTES

Step - Repetition	Number of Samples For Each Waste for Each Attenuation/Mobilization								
	Exxon PFBC			Alliance AFBC			Georgetown AFBC		
	1 day	2 day	7 day	1 day	2 day	7 day	1 day	2 day	7 day
Step 4[1]	2	2	4	2	2	4			2
Step 5-1[1]			2			2			
5-2			2			2			
5-3			2			2			
5-4			2			2			
5-5			2			2			
5-6			2			2			
5-7						2			
5-8						2			
5-9						2			
Step 6-1[1]			2			2			
6-2			2			2			
6-3			2			2			
6-4			2			2			
6-5			2			2			
Step 7-1			2						
7-2			2						
7-3			2						
7-4			2						
7-5			2						
7-6			2						

[1]Number of samples generated for each of the six disposal media. To obtain the total number of samples generated, multiply each entry by six.

e Is a number identifying the FBC waste residues, as follows:
e = 1 Exxon PFBC waste
e = 3 Alliance AFBC waste
e = 4 Georgetown AFBC waste

f Is a number identifying the disposal medium, as follows:
f = 08 Shale
f = 09 Mine interburden
f = 10 Sandstone
f = 11 Greer limestone
f = 12 Glacial till
f = 13 Alluvium
f = 14 Greenbrier limestone

& Denotes multiple extractions. All extractions were performed in at least duplicate (A and B). If more than two extractions are performed, the additional samples generated are assigned additional letters (C, D, E, etc.) in the order of sample generation. Not all of the multiple extractions are performed at the same time (e.g., Step 1). For some leachate samples, the letters are preceded by an asterisk (*), which denotes that a leachate sample is a composite of several leachates. The absence of an asterisk indicates an individually generated leachate.

Some examples of the use of the symbolism to identify leachate and solid samples are as follows:

L470108C Denotes a leachate sample from Step 4 in the protocol which was generated during a seven day extraction performed without repetition. The attenuation medium was shale and the extraction was done with PFBC leachate. This is the third extraction of multiple extractions.

L573314B Denotes a leachate sample from Step 5 in the protocol which has come from the third repetition of the step. The equilibration time was seven days. Limestone disposal medium was equilibrated with Alliance AFBC leachate to produce this sample. This is the second of duplicate extractions.

A573314B Denotes the solid disposal medium residue that correlates with the preceding leachate sample. The solid is always coded to match up with its liquid leachate phase.

Because protocol Steps 4 and 5 use Step 1 leachate as input volumes, the appropriate protocol Step 1 samples are repeated here for case of reference.

After the listings of the appropriate Step 1 data, Steps 4, 5, and 6 (seven day) leachates are presented. Since these steps depend on the disposal medium, the data for Steps 4, 5, and 6 (seven-day) leaching of waste 1 are first shown for shale (medium 08). Then the Step 4, 5, and 6 (seven-day) leaching data for waste 7 and disposal medium 09 (interburden) are presented. This sequence is then given for the remainder of the media (10, 11, 12, 13, 14). The same sample sequence for waste 1 is then presented for waste 3 and again for waste 4. As noted, only Step 4 was run for the Georgetown waste (4). Immediately following the waste 4, Step 4 data, the abbreviated one- and two-day attenuation data are presented (Step 4, only). Finally, data from a modification of Step 5, designated as Step 7 (see Appendix D), are listed.

	AL	AS	B	BA	BE	CA	CD
L 170100*A	0.73	<0.08	14.	0.18	.	1900.	<0.005
L 170100*B	0.87	<0.08	14.	0.15	.	1800.	<0.005
L 170100A	0.45	<0.08	15.	0.12	.	1300.	<0.005
L 170100B	0.37	<0.08	14.	0.16	.	1700.	<0.005
L 170100C	0.29	<0.08	11.	0.18	.	1700.	<0.005
L 170100D	0.97	<0.08	11.	0.16	.	1600.	<0.005
L 170100E	0.66	<0.08	15.	0.21	.	1900.	<0.005
L 170100F	0.71	<0.08	12.	0.14	.	1500.	<0.005
L 170100W	1.2	.	5.1	0.24	.	.	<0.005
L 170100X	1.0	.	5.2	0.30	.	.	<0.005
L 170100Y	1.4	.	4.9	0.24	.	.	<0.005
L 1701002	0.91	.	5.2	0.28	.	.	<0.005
L 170200A	4.3	.	27.	0.31	.	1500.	<0.005
L 170200B	1.6	.	25.	0.70	.	1400.	<0.005
L 170200C	1.4	.	27.	0.81	.	1500.	<0.005
L 170200D	3.3	.	27.	0.33	.	1400.	<0.005
L 170200E	6.0	.	29.	0.32	.	1500.	<0.005
L 170200F	1.1	.	27.	0.54	.	1500.	<0.005
L 1702006	4.7	.	28.	0.34	.	1500.	<0.005
L 170200H	6.5	.	26.	0.37	.	1400.	<0.005
L 170200I	1.5	.	27.	0.46	.	1500.	<0.005
L 170200J	4.6	.	30.	0.35	.	1600.	<0.005
L 170200K	2.9	.	29.	0.35	.	1500.	<0.005
L 170200L	2.8	.	29.	0.30	.	1600.	<0.005
L 170300*A	0.45	.	0.92	0.23	0.0010	.	0.010
L 170300*AA	1.4	.	4.1	0.11	0.0090	1100.	0.052
L 170300*B	0.40	.	0.86	0.25	0.0010	1300.	<0.004
L 170300*BB	0.48	.	1.0	0.13	0.0020	1100.	0.012
L 170300*C	0.44	.	2.1	0.041	0.0050	.	0.033
L 170300*CC	0.61	.	1.4	0.14	0.0030	1100.	0.016
L 170300*D	<0.05	.	0.72	<0.001	0.0020	1400.	0.012
L 170300*E	0.35	.	1.6	0.061	0.0030	1400.	0.025
L 170300*F	0.52	.	1.4	0.054	0.0030	1400.	0.023
L 170300*H	1.2	.	5.2	0.066	0.0090	1200.	0.058
L 170300*I	1.6	.	6.8	0.090	0.011	1300.	0.072
L 170300*J	1.0	.	4.5	0.11	0.0070	2800.	0.047
L 170300*K	1.5	.	6.5	0.081	0.011	1200.	0.072
L 170300*L	1.3	.	6.3	0.056	0.011	1200.	0.069
L 170300*M	1.3	.	6.1	0.072	0.010	2500.	0.067
L 170300*N	1.2	.	5.1	0.079	0.0080	1200.	0.057
L 170300*O	0.93	.	3.6	0.10	0.0050	2000.	0.041
L 170300*P	1.5	.	4.6	0.13	.	1300.	0.052
L 170300*Q	2.1	.	6.4	0.071	.	950.	0.078
L 170300*R	1.8	.	5.6	0.11	.	1000.	0.066
L 170300*S	2.6	.	7.9	0.093	.	900.	0.093
L 170300*T	1.1	.	3.3	0.13	.	1200.	0.036
L 170300*U	1.7	.	5.2	0.12	.	1100.	0.059

	AL	AS	B	BA	BE	CA	CD
L 170300*V	2.2	.	6.9	0.099	.	980.	0.081
L 170300*W	2.6	.	8.0	0.056	.	980.	0.099
L 170300*X	1.1	.	3.3	0.12	0.0070	1100.	0.041
L 170300*Y	1.0	.	2.9	0.13	0.0060	1100.	0.037
L 170300*Z	1.1	.	3.4	0.11	0.0080	1100.	0.044
L 170400*A	<0.25	.	<0.04	0.19	<0.002	1500.	<0.04
L 170400*B	<0.25	.	<0.04	0.19	<0.002	1400.	<0.04
L 170400A	<0.25	.	<0.04	0.26	<0.002	1600.	<0.04
L 170400B	<0.25	.	0.080	0.19	0.0030	1600.	<0.04
L 170400C	0.42	.	0.40	0.19	0.0030	1500.	<0.04
L 170400D	<0.25	.	0.44	0.20	<0.002	1400.	<0.04
L 120100A	0.75	<0.08	13.	0.26	.	340.	<0.005
L 120100B	1.1	<0.08	12.	0.28	.	1800.	<0.005
L 120100C	0.65	<0.08	12.	0.28	.	1200.	<0.005
L 120100D	.	.	.	.	.	.	.
L 120100E	0.60	<0.08	12.	0.31	.	1200.	<0.005
L 120100F	0.48	.	14.	0.23	.	0.19	<0.005
L 110100A	0.39	<0.08	8.0	0.28	.	1600.	<0.005
L 110100B	0.49	<0.08	8.3	0.26	.	1500.	<0.005
L 110100C	0.50	<0.08	7.6	0.18	.	1600.	<0.005
L 110100D	1.3	<0.08	8.6	0.13	.	820.	<0.005
L 110100E	1.4	<0.08	7.9	0.12	.	1600.	<0.005
L 110100F	1.7	<0.08	8.1	0.13	.	1600.	<0.005
L 470108A	<0.06	.	1.6	0.65	.	0.70	0.77
L 470108B	0.065	.	0.039	0.11	.	510.	<0.005
L 470108C	0.93	.	0.40	0.036	0.0030	470.	0.014
L 470108D	1.6	.	0.71	0.028	0.0080	420.	0.047
L 571108A	1.0	.	0.66	0.26	.	840.	<0.005
L 571108B	0.31	.	0.28	0.15	.	840.	<0.005
L 572108A	0.85	.	0.48	0.15	.	940.	<0.005
L 572108B	0.66	.	0.83	0.25	.	1000.	<0.005
L 573108A	0.66	.	1.0	0.26	.	1100.	<0.005
L 573108B	1.1	.	0.97	0.23	.	1100.	<0.005
L 574108A	0.64	.	0.60	0.15	.	1000.	<0.005
L 574108B	0.41	.	0.61	0.15	.	1000.	<0.005
L 575108A	0.91	.	0.88	0.25	.	990.	<0.005
L 575108B	1.2	.	0.79	0.21	.	950.	<0.005
L 576108A	1.6	.	1.1	0.21	.	1000.	<0.005
L 576108B	1.3	.	1.1	0.20	.	990.	<0.005
L 671108A	0.87	.	0.34	0.038	0.0020	350.	0.0090

	AL	AS	B	BA	BE	CA	CD
L 671108B	1.4	.	0.66	0.029	0.0070	350.	0.043
L 672108A	0.54	.	0.26	0.029	0.0010	370.	<0.004
L 672108B	1.3	.	0.71	0.063	0.0060	430.	0.036
L 673108A	0.78	.	0.44	0.13	0.0020	370.	0.014
L 673108B	1.2	.	0.62	0.017	0.0060	420.	0.034
L 674108A	1.2	.	0.61	0.044	0.0050	460.	0.027
L 674108B	0.71	.	0.41	0.15	<0.0005	400.	<0.008
L 675108A	0.78	.	0.45	0.15	<0.0005	410.	<0.008
L 675108B	1.2	.	0.54	0.034	0.0040	450.	0.019
L 470109A	0.29	<0.08	<0.004	0.037	.	1100.	<0.005
L 470109B	0.28	<0.08	0.57	0.055	.	1300.	<0.005
L 470109C	0.17	.	0.22	0.12	.	760.	<0.005
L 470109D	0.46	.	1.1	0.25	.	780.	<0.005
L 571109A	0.51	.	1.6	0.13	.	900.	<0.005
L 571109B	0.54	.	2.5	0.24	.	950.	<0.005
L 571109C	.	.	.	.	.	.	.
L 571109D	.	.	.	.	.	.	.
L 572109A	1.1	.	2.0	0.14	.	950.	<0.005
L 572109B	2.1	.	1.9	0.14	.	770.	<0.005
L 572109C	.	.	.	.	.	.	.
L 572109D	.	.	.	.	.	.	.
L 573109A	0.92	.	2.2	0.12	.	1000.	<0.005
L 573109B	2.4	.	2.8	0.12	.	850.	<0.005
L 573109C	.	.	.	.	.	.	.
L 573109D	.	.	.	.	.	.	.
L 574109A	0.42	.	2.4	0.15	.	1100.	<0.005
L 574109B	0.85	.	2.9	0.23	.	1100.	<0.005
L 574109C	.	.	.	.	.	.	.
L 574109D	.	.	.	.	.	.	.
L 575109A	1.0	.	2.4	0.22	.	1000.	<0.005
L 575109B	0.92	.	2.8	0.23	.	1000.	<0.005
L 576109A	1.3	.	2.7	0.23	.	1100.	<0.005
L 576109B	1.3	.	2.9	0.24	.	1100.	<0.005
L 671109A	2.0	.	0.68	0.19	.	500.	0.039
L 671109B	2.0	.	0.65	0.17	.	470.	0.043
L 672109A	4.8	.	0.45	0.091	.	220.	0.18
L 672109B	5.0	.	0.51	0.10	.	190.	0.19
L 672109D	.	.	.	.	.	.	.
L 672109E	.	.	.	.	.	.	.
L 673109A	4.2	.	0.81	0.13	.	520.	0.016
L 673109B	4.4	.	0.65	0.11	.	440.	0.056
L 674109A	7.5	.	0.67	0.11	.	180.	0.24
L 674109B	6.1	.	0.78	0.18	.	500.	0.026
L 675109A	8.3	.	1.1	0.18	.	550.	0.014

	AL	AS	B	BA	BE	CA	CD
L 675109B	8.4	•	1.2	0.20	•	560.	0.0090
L 670110A	0.45	•	0.15	0.10	•	820.	<0.005
L 670110B	0.79	•	0.48	0.19	•	760.	<0.005
L 670110C	0.81	•	0.62	0.042	0.0020	750.	<0.008
L 670110D	0.85	•	0.73	0.11	0.0020	710.	0.014
L 671110A	0.79	•	0.86	0.24	•	950.	<0.005
L 671110B	0.74	•	0.80	0.23	•	970.	<0.005
L 672110A	0.74	•	1.1	0.20	•	1100.	<0.005
L 672110B	1.5	•	0.57	0.11	•	880.	<0.005
L 673110A	2.4	•	0.91	0.15	•	830.	<0.005
L 673110B	1.1	•	1.3	0.21	•	1180.	<0.005
L 674110A	0.78	•	0.78	0.13	•	1100.	<0.005
L 674110B	1.8	•	0.60	0.11	•	810.	<0.005
L 675110A	1.3	•	1.0	0.21	•	1000.	<0.005
L 675110B	1.2	•	1.0	0.21	•	1000.	<0.005
L 676110A	1.9	•	1.4	0.20	•	1100.	<0.005
L 676110B	1.7	•	1.3	0.19	•	1100.	<0.005
L 671110A	0.65	•	0.20	0.044	<0.0005	460.	<0.008
L 671110B	0.60	•	0.41	0.12	0.0010	460.	<0.008
L 672110A	0.20	•	0.16	0.054	<0.0005	400.	<0.008
L 672110B	0.61	•	0.43	0.10	0.0010	430.	<0.008
L 673110A	0.73	•	0.33	0.0080	0.0020	440.	<0.008
L 673110B	0.86	•	0.53	0.13	0.0010	490.	<0.008
L 674110A	0.77	•	0.30	0.020	0.0010	450.	<0.008
L 674110B	0.94	•	0.53	0.13	0.0010	460.	0.013
L 675120A	0.88	•	0.46	0.13	<0.0005	490.	<0.008
L 675110B	0.88	•	0.33	0.030	0.0010	490.	<0.008
L 670111A	0.29	<0.08	3.5	0.078	•	1600.	<0.005
L 670111B	0.41	<0.08	4.4	0.088	•	1900.	<0.005
L 671111A	0.31	<0.08	<0.004	0.056	•	1500.	<0.005
L 671111B	0.37	<0.08	<0.004	0.034	•	1400.	<0.005
L 670112A	0.78	•	0.56	0.11	•	550.	<0.005
L 670112B	0.93	•	0.97	0.21	•	570.	<0.005
L 670112C	0.60	•	1.2	0.076	<0.0005	450.	<0.008
L 670112D	1.1	•	1.2	0.063	<0.0005	450.	<0.008
L 671112A	0.42	•	1.4	0.25	•	660.	<0.005

	AL	AS	B	BA	BE	CA	CD
L 571112B	0.54	.	1.5	0.24	.	670.	<0.005
L 572112A	0.59	.	2.1	0.26	.	820.	<0.005
L 572112B	0.47	.	2.3	0.25	.	820.	<0.005
L 573112A	0.84	.	2.2	0.16	.	910.	<0.005
L 573112B	1.8	.	1.7	0.13	.	730.	<0.005
L 574112A	0.45	.	2.6	0.18	.	940.	<0.005
L 574112B	0.80	.	3.0	0.28	.	970.	<0.005
L 575112A	1.1	.	3.8	0.24	.	990.	<0.005
L 575112B	1.3	.	2.9	0.25	.	940.	<0.005
L 576112A	1.7	.	3.5	0.26	.	1100.	<0.005
L 576112B	1.7	.	3.2	0.24	.	990.	<0.005
L 671112A	0.81	.	0.86	0.12	<0.0005	340.	<0.008
L 671112B	0.46	.	0.85	0.077	<0.0005	350.	<0.008
L 672112A	0.60	.	0.74	0.094	<0.0005	320.	<0.008
L 672112B	0.51	.	0.73	0.15	<0.0005	310.	<0.008
L 673112A	0.52	.	0.57	0.10	<0.0005	290.	<0.008
L 673112B	0.78	.	0.66	0.092	<0.0005	300.	<0.008
L 674112A	0.65	.	0.53	0.14	<0.0005	280.	<0.008
L 674112B	1.1	.	0.64	0.10	<0.0005	290.	<0.008
L 675112A	1.1	.	0.54	0.15	<0.0005	280.	<0.008
L 675112B	0.89	.	0.60	0.14	<0.0005	290.	<0.008
L 670113A	0.75	.	0.27	0.17	.	540.	<0.005
L 670113B	1.3	.	0.59	0.29	.	550.	<0.005
L 670113C	0.60	.	0.55	0.24	<0.0005	510.	<0.008
L 670113D	0.55	.	0.60	0.28	<0.0005	510.	<0.008
L 571113A	0.61	.	1.6	0.30	.	890.	<0.005
L 571113B	1.3	.	1.2	0.16	.	830.	<0.005
L 572113A	5.3	.	0.88	0.12	.	380.	0.19
L 572113B	4.6	.	1.8	0.13	.	490.	0.14
L 573113A	2.5	.	1.5	0.17	.	750.	0.013
L 673113B	3.7	.	1.2	0.12	.	690.	0.077
L 574113A	0.81	.	2.3	0.16	.	1100.	<0.005
L 574113B	1.2	.	2.2	0.16	.	1100.	<0.005
L 575113A	1.4	.	2.7	0.25	.	1100.	<0.005
L 575113B	1.2	.	2.9	0.27	.	1100.	<0.005
L 576113A	1.7	.	3.2	0.22	.	1300.	<0.005
L 576113B	1.6	.	3.4	0.23	.	1200.	<0.005
L 671113A	2.8	.	0.35	0.18	<0.0005	300.	<0.008
L 671113B	3.4	.	0.35	0.21	<0.0005	300.	<0.008
L 672113A	0.33	.	0.52	0.22	<0.0005	280.	<0.008
L 672113B	0.65	.	0.23	0.20	<0.0005	270.	<0.008
L 673113A	0.40	.	0.54	0.19	<0.0005	260.	<0.008

	AL	AS	B	BA	BE	CA	CD
L 673113B	0.35	.	0.21	0.18	<0.0005	260.	<0.008
L 674113A	0.43	.	0.67	0.20	<0.0005	240.	<0.008
L 674113B	0.59	.	0.48	0.19	<0.0005	240.	<0.008
L 675113A	0.60	.	0.59	0.21	<0.0005	210.	<0.008
L 675113B	0.37	.	0.28	0.17	<0.0005	230.	<0.008
L 670114A	1.4	.	0.56	0.21	.	560.	0.0070
L 670114B	1.5	.	0.61	0.21	.	570.	0.0063
L 670124C	1.8	.	0.72	0.17	.	590.	0.023
L 670124D	2.2	.	0.66	0.16	.	470.	0.060
L 671114A	1.5	.	2.5	0.12	.	1100.	<0.005
L 671114B	4.1	.	1.4	0.13	.	620.	0.11
L 672114A	1.3	.	4.1	0.17	.	1300.	<0.005
L 672114B	1.4	.	3.9	0.17	.	1200.	<0.005
L 673114A	4.9	.	1.4	0.094	.	440.	0.17
L 673114B	4.1	.	1.7	0.099	.	580.	0.12
L 674114A	1.8	.	3.2	0.11	.	950.	<0.005
L 674114B	0.98	.	4.3	0.13	.	1200.	<0.005
L 675114A	1.4	.	6.0	0.23	.	1400.	<0.005
L 675114B	1.1	.	5.8	0.20	.	1400.	<0.005
L 676114A	1.6	.	6.6	0.22	.	1400.	<0.005
L 676114B	1.6	.	6.3	0.22	.	1400.	<0.005
L 671114A	0.61	.	0.48	0.22	.	280.	0.011
L 671114B	4.5	.	0.42	0.13	.	120.	0.17
L 672114A	0.73	.	1.3	0.22	.	220.	<0.005
L 672114B	0.67	.	0.99	0.20	.	230.	<0.005
L 673114A	0.62	.	0.75	0.16	.	180.	0.011
L 673114B	0.61	.	0.69	0.17	.	190.	0.0095
L 674114A	0.63	.	1.1	0.19	.	150.	0.0088
L 674114B	0.66	.	0.74	0.20	.	160.	0.012
L 675114A	.	.	.	.	.	.	.
L 675114B	.	.	.	.	.	.	.
L 670308A	0.48	.	1.9	0.064	0.0030	450.	0.019
L 670308B	0.52	.	1.9	0.068	0.0020	450.	0.020
L 670308C	.	.	.	.	.	.	.
L 670308D	.	.	.	.	.	.	.
L 671308A	0.064	.	0.14	0.058	<0.0005	800.	<0.008
L 671308B	0.12	.	0.50	0.015	0.0010	810.	<0.008
L 672308A	0.75	.	2.8	0.080	0.0040	970.	0.028
L 672308B	0.71	.	3.9	0.10	0.0040	980.	0.029
L 673308A	0.97	.	3.9	0.10	0.0060	1000.	0.042

	AL	AS	B	BA	BE	CA	CD
L 573308B	0.93	.	3.8	0.089	0.0060	990.	0.040
L 574308A	0.96	.	4.2	0.088	0.0060	1100.	0.044
L 574308B	1.0	.	4.3	0.065	0.0070	1100.	0.044
L 575308A	0.92	.	3.6	0.13	0.0050	1100.	0.039
L 575308B	0.97	.	4.0	0.098	0.0060	1000.	0.043
L 576308A	0.90	.	2.6	0.10	.	920.	0.029
L 576308B	1.1	.	3.4	0.11	.	1000.	0.037
L 577308A	1.0	.	3.4	0.12	.	1000.	0.039
L 577308B	0.85	.	2.8	0.097	.	920.	0.034
L 578308A	1.3	.	4.2	0.10	.	980.	0.048
L 578308B	1.3	.	3.9	0.13	.	940.	0.044
L 579308A	2.1	.	6.6	0.090	.	880.	0.079
L 579308B	1.3	.	4.0	0.094	.	920.	0.044
L 671308A	0.91	.	1.9	0.063	0.0020	310.	0.018
L 671308B	0.91	.	2.2	0.070	0.0030	300.	0.022
L 672308A	0.60	.	1.7	0.072	0.0010	310.	0.016
L 672308B	0.58	.	1.7	0.063	0.0010	320.	0.016
L 673308A	0.61	.	1.3	0.053	.	340.	0.0090
L 673308B	0.71	.	1.7	0.051	.	330.	0.017
L 674308A	0.89	.	1.9	0.059	.	330.	0.017
L 674308B	0.64	.	1.1	0.055	.	360.	<0.008
L 675308A	1.2	.	2.8	0.10	.	340.	0.010
L 675308B	1.2	.	2.7	0.10	.	340.	<0.008
L 470309A	0.074	.	0.24	0.0060	<0.0005	630.	<0.008
L 470309B	0.24	.	0.17	0.072	<0.0005	610.	<0.008
L 470309C	1.6	.	5.0	0.051	.	480.	0.057
L 470309D	0.74	.	2.2	0.052	.	510.	0.023
L 571309A	<0.05	.	<0.009	0.017	<0.0005	870.	<0.008
L 571309B	0.16	.	0.31	0.087	<0.0005	870.	<0.008
L 572309A	0.92	.	2.8	0.067	0.0060	930.	0.041
L 572309B	1.1	.	4.4	0.070	0.0070	990.	0.047
L 573309A	1.2	.	5.3	0.062	0.0080	1100.	0.057
L 573309B	1.3	.	5.6	0.053	0.0090	1100.	0.060
L 574309A	1.1	.	4.6	0.077	0.0070	1100.	0.048
L 574309B	1.1	.	4.3	0.082	0.0070	1100.	0.048
L 575309A	0.96	.	3.9	0.086	0.0060	1100.	0.040
L 575309B	0.85	.	3.5	0.084	0.0050	1100.	0.036
L 576309A	1.1	.	3.5	0.082	.	960.	0.040
L 576309B	1.1	.	3.3	0.089	.	970.	0.037
L 577309A	1.8	.	5.5	0.082	.	940.	0.065
L 577309B	0.89	.	2.6	0.10	.	1100.	0.028
L 578309A	2.0	.	6.4	0.088	.	930.	0.074
L 578309B	1.6	.	4.9	0.088	.	960.	0.056
L 579309A	1.9	.	6.1	0.071	.	830.	0.073

	AL	AS	B	BA	BE	CA	CD
L 579309B	1.9	.	5.9	0.073	.	900.	0.068
L 671309A	1.2	.	3.3	0.087	.	390.	0.034
L 671309B	1.1	.	2.9	0.098	.	390.	0.027
L 672309A	1.4	.	3.1	0.033	.	370.	0.048
L 672309B	1.6	.	3.8	0.026	.	360.	0.056
L 673309A	3.0	.	3.3	0.018	.	360.	0.067
L 673309B	3.1	.	3.0	0.013	.	380.	0.068
L 674309A	5.1	.	1.6	0.012	0.020	440.	0.079
L 674309B	5.3	.	1.4	0.0010	0.020	450.	0.078
L 675309A	6.0	.	1.1	0.0060	0.023	450.	0.089
L 675309B	5.8	.	1.1	<0.001	0.023	450.	0.088
L 670310A	0.073	.	0.26	0.017	<0.0005	740.	<0.008
L 670310B	0.082	.	0.45	<0.001	0.0010	720.	<0.008
L 670310C	0.36	.	1.3	0.034	.	540.	0.012
L 670310D	0.62	.	1.9	0.039	.	530.	0.021
L 671310A	0.21	.	0.24	0.074	<0.0005	950.	<0.008
L 671310B	0.16	.	0.15	0.068	<0.0005	880.	<0.008
L 672310A	0.69	.	3.1	0.021	0.0050	1000.	0.033
L 672310B	0.76	.	2.8	0.085	0.0040	1000.	0.029
L 673310A	1.3	.	5.4	0.033	0.0090	1100.	0.059
L 673310B	1.1	.	4.8	0.040	0.0080	1100.	0.051
L 674310A	0.89	.	3.7	0.059	0.0060	1000.	0.041
L 674310B	0.98	.	4.3	0.065	0.0070	1000.	0.047
L 675310A	0.65	.	2.7	0.066	0.0040	1000.	0.030
L 675310B	0.87	.	3.6	0.064	0.0060	1100.	0.038
L 676310A	1.4	.	4.2	0.063	.	960.	0.048
L 676310B	1.9	.	6.1	0.046	.	790.	0.073
L 677310A	1.7	.	5.0	0.074	.	920.	0.058
L 677310B	1.5	.	4.4	0.052	.	830.	0.052
L 678310A	2.2	.	6.7	0.070	.	910.	0.077
L 678310B	1.8	.	3.3	0.069	.	1000.	0.036
L 679310A	1.5	.	4.6	0.059	.	930.	0.054
L 679310B	1.9	.	5.7	0.058	.	970.	0.065
L 671310A	0.32	.	0.50	0.024	<0.0005	370.	<0.008
L 671310B	0.28	.	0.37	0.013	<0.0005	360.	<0.008
L 672310A	0.35	.	0.48	<0.001	<0.0005	370.	<0.008
L 672310B	0.42	.	0.51	0.015	0.0010	370.	<0.008
L 673310A	0.71	.	0.64	0.022	0.0010	410.	<0.008
L 673310B	0.68	.	0.59	0.014	0.0010	400.	0.0090
L 674310A	0.78	.	0.47	0.021	0.0010	450.	<0.008
L 674310B	0.87	.	0.86	0.030	0.0020	450.	0.012
L 675310A	1.1	.	1.0	<0.001	0.0020	490.	0.013

	AL	AS	B	BA	BE	CA	CD
L 675310B	1.1	.	1.2	0.012	0.0020	490.	0.015
L 470312A	0.060	.	<0.009	0.039	<0.0005	450.	<0.008
L 470312B	0.38	.	0.023	0.0090	<0.0005	440.	<0.008
L 470312C	0.45	.	0.31	0.084	<0.0005	400.	<0.008
L 470312D	0.37	.	0.12	0.095	<0.0005	400.	<0.008
L 571312A	0.073	.	0.16	0.085	<0.0005	600.	<0.008
L 571312B	<0.05	.	<0.009	0.039	<0.0005	570.	<0.008
L 572312A	0.71	.	3.0	0.11	0.0040	790.	0.030
L 572312B	0.81	.	3.3	0.094	0.0050	750.	0.037
L 573312A	0.95	.	4.1	0.086	0.0060	880.	0.044
L 573312B	0.96	.	4.1	0.096	0.0070	890.	0.047
L 574312A	0.88	.	3.7	0.13	0.0060	970.	0.040
L 574312B	1.1	.	4.6	0.094	0.0070	960.	0.051
L 575312A	0.93	.	3.8	0.13	0.0060	1000.	0.042
L 575312B	0.94	.	3.8	0.13	0.0060	1000.	0.040
L 576312A	1.5	.	4.5	0.11	.	860.	0.050
L 576312B	1.5	.	4.5	0.088	.	780.	0.054
L 577312A	1.4	.	4.5	0.10	.	850.	0.053
L 577312B	1.7	.	5.3	0.11	.	840.	0.062
L 578312A	1.7	.	5.2	0.12	.	880.	0.061
L 578312B	1.1	.	3.3	0.13	.	950.	0.035
L 579312A	1.6	.	4.8	0.10	.	920.	0.056
L 579312B	2.0	.	6.2	0.085	.	790.	0.075
L 671312A	0.36	.	0.17	0.090	<0.0005	310.	<0.008
L 671312B	0.20	.	0.19	0.032	<0.0005	310.	<0.008
L 672312A	0.51	.	0.12	0.11	<0.0005	290.	<0.008
L 672312B	0.46	.	0.027	0.076	<0.0005	290.	<0.008
L 673312A	0.51	.	<0.009	0.080	<0.0005	270.	<0.008
L 673312B	0.60	.	0.071	0.067	<0.0005	280.	<0.008
L 674312A	0.52	.	<0.009	0.064	<0.0005	280.	<0.008
L 674312B	0.53	.	0.022	0.087	<0.0005	270.	<0.008
L 675312A	0.56	.	<0.009	0.10	<0.0005	270.	<0.008
L 675312B	0.51	.	<0.009	0.11	<0.0005	270.	<0.008
L 470313A	0.070	.	0.15	0.20	<0.0005	570.	<0.008
L 470313B	0.14	.	0.078	0.20	<0.0005	570.	<0.008
L 470313C	0.079	.	0.12	0.19	<0.0005	520.	<0.008
L 470313D	0.23	.	0.33	0.22	<0.0005	530.	<0.008
L 571313A	0.21	.	0.13	0.26	<0.0005	930.	<0.008
L 571313B	0.14	.	0.35	0.19	<0.0005	940.	<0.008
L 572313A	0.79	.	2.9	0.17	0.0040	1100.	0.032

	AL	AS	B	BA	BE	CA	CD
L 572313B	0.88	.	3.1	0.19	0.0050	1100.	0.036
L 573313A	1.6	.	7.3	0.066	0.013	1100.	0.040
L 573313B	1.3	.	5.3	0.12	0.0090	1100.	0.058
L 574313A	1.1	.	4.6	0.15	0.0070	1100.	0.052
L 574313B	1.1	.	4.7	0.13	0.0070	1100.	0.054
L 575313A	1.0	.	3.5	0.14	0.0050	1100.	0.037
L 575313B	0.88	.	3.6	0.13	0.0050	1100.	0.037
L 576313A	2.2	.	6.7	0.080	.	770.	0.080
L 576313B	1.7	.	4.8	0.12	.	970.	0.056
L 577313A	1.7	.	5.2	0.11	.	940.	0.058
L 577313B	2.1	.	6.2	0.097	.	870.	0.075
L 578313A	1.8	.	5.7	0.11	.	970.	0.065
L 578313B	1.6	.	4.9	0.12	.	990.	0.055
L 579313A	2.0	.	5.8	0.074	.	840.	0.068
L 579313B	1.3	.	4.0	0.089	.	960.	0.046
L 671313A	1.7	.	0.048	0.11	<0.0005	270.	<0.008
L 671313B	1.8	.	0.13	0.16	<0.0005	270.	<0.008
L 672313A	<0.05	.	<0.009	0.20	<0.0005	250.	<0.008
L 672313B	0.26	.	0.044	0.20	<0.0005	250.	<0.008
L 673313A	0.18	.	0.075	0.099	<0.0005	230.	<0.008
L 673313B	0.23	.	0.18	0.086	<0.0005	240.	<0.008
L 674313A	0.17	.	<0.009	0.13	<0.0005	210.	<0.008
L 674313B	0.25	.	0.18	0.11	<0.0005	210.	<0.008
L 675313A	0.23	.	<0.009	0.080	<0.0005	210.	<0.008
L 675313B	0.22	.	<0.009	0.088	<0.0005	210.	<0.008
L 470314A	0.12	.	0.051	0.084	<0.0005	670.	<0.008
L 470314B	0.078	.	<0.009	0.072	<0.0005	670.	<0.008
L 470314C	0.084	.	0.35	0.075	<0.0005	560.	<0.008
L 470314D	0.16	.	0.40	0.095	<0.0005	580.	<0.008
L 571314A	0.18	.	0.71	0.0010	0.0010	0.12	<0.008
L 571314B	0.18	.	0.55	0.033	<0.0005	0.11	<0.008
L 572314A	1.3	.	5.7	0.052	0.0090	1200.	0.062
L 572314B	1.0	.	4.0	0.070	0.0060	1100.	0.041
L 573314A	1.3	.	5.8	0.061	0.0090	1200.	0.063
L 573314B	1.3	.	5.9	0.045	0.010	1200.	0.063
L 574314A	1.3	.	5.7	0.068	0.0090	1200.	0.062
L 574314B	1.1	.	4.7	0.066	0.0080	1200.	0.051
L 575314A	1.0	.	4.1	0.083	0.0060	1200.	0.043
L 575314B	1.1	.	4.5	0.074	0.0070	1200.	0.047
L 576314A	1.7	.	5.1	0.084	.	1100.	0.058
L 576314B	1.8	.	5.5	0.15	.	970.	0.044
L 577314A	2.1	.	6.4	0.063	.	970.	0.071
L 577314B	2.4	.	7.2	0.059	.	950.	0.084
L 578314A	1.3	.	4.0	0.096	.	1100.	0.045

	AL	AS	B	BA	BE	CA	CD
L 578314B	2.3	.	7.1	0.383	.	1080.	0.079
L 579314A	2.2	.	7.0	0.055	.	920.	0.081
L 579314B	1.4	.	4.4	0.088	.	1100.	0.043
L 671314A	0.12	.	0.035	0.062	<0.0005	210.	<0.008
L 671314B	0.23	.	0.15	0.050	<0.0005	200.	<0.008
L 672314A	0.56	.	0.027	0.077	<0.0005	140.	<0.008
L 672314B	0.59	.	0.032	0.048	<0.0005	140.	<0.008
L 673314A	0.22	.	<0.009	0.080	<0.0005	100.	<0.008
L 673314B	0.27	.	0.11	0.098	<0.0005	110.	<0.008
L 674314A	0.23	.	0.035	0.058	<0.0005	99.	<0.008
L 674314B	0.24	.	0.050	0.076	<0.0005	98.	<0.008
L 675314A	0.24	.	0.070	0.066	<0.0005	90.	<0.008
L 675314B	0.24	.	0.15	0.074	<0.0005	89.	<0.008
L 470408A	<0.25	.	<0.04	0.093	<0.002	600.	<0.04
L 470408B	<0.25	.	<0.04	0.10	<0.002	550.	<0.04
L 470409A	<0.25	.	<0.04	0.12	<0.002	780.	<0.04
L 470409B	<0.25	.	<0.04	0.12	<0.002	250.	<0.04
L 470410A	<0.25	.	1.1	0.14	<0.002	660.	<0.04
L 470410B	<0.25	.	0.47	0.14	<0.002	680.	<0.04
L 470412A	<0.25	.	0.28	0.12	<0.002	560.	<0.04
L 470412B	<0.25	.	0.23	0.14	<0.002	560.	<0.04
L 470413A	<0.25	.	<0.04	0.16	<0.002	680.	<0.04
L 470413B	<0.25	.	<0.04	0.15	<0.002	660.	<0.04
L 470414A	<0.25	.	<0.04	0.10	<0.002	750.	<0.04
L 470414B	<0.25	.	<0.04	0.12	<0.002	780.	<0.04
L 420108A	0.69	.	0.66	0.25	.	700.	<0.005
L 420108B	0.74	.	0.90	0.26	.	700.	<0.005
L 420109A	1.4	.	3.2	0.21	.	830.	<0.005
L 420109B	1.1	.	3.4	0.23	.	790.	<0.005
L 420110A	1.2	.	2.2	0.20	.	920.	<0.005
L 420110B	1.6	.	2.7	0.20	.	890.	<0.005
L 420112A	0.86	.	3.1	0.25	.	720.	<0.005
L 420112B	1.2	.	2.9	0.24	.	680.	<0.005
L 420113A	1.1	.	2.1	0.28	.	730.	<0.005
L 420113B	1.1	.	2.4	0.35	.	710.	<0.005
L 420114A	0.96	.	1.9	0.24	.	790.	<0.005
L 420114B	1.2	.	1.8	0.24	.	780.	<0.005
L 420308A	0.057	.	0.18	0.12	<0.0005	610.	<0.008
L 420308B	0.12	.	0.34	0.078	<0.0005	620.	<0.008
L 420309A	0.14	.	0.56	0.061	0.0010	710.	<0.008
L 420309B	0.21	.	0.55	0.057	0.0010	690.	<0.008
L 420310A	0.19	.	0.59	0.052	0.0010	820.	<0.008

	AL	AS	B	BA	BE	CA	CD
L 420310B	0.23	.	0.65	0.040	0.0010	810.	<0.008
L 420312A	0.17	.	0.49	0.081	0.0010	560.	<0.008
L 420312B	0.058	.	0.065	0.060	<0.0005	570.	<0.008
L 420313A	0.070	.	0.056	0.27	<0.0005	660.	<0.008
L 420313B	0.079	.	0.22	0.28	<0.0005	660.	<0.008
L 420314A	0.17	.	0.028	0.10	<0.0005	650.	<0.008
L 420314B	<0.05	.	0.072	0.11	<0.0005	650.	<0.008
L 410108A	0.30	<0.08	<0.004	0.072	.	1200.	<0.005
L 410108B	0.28	<0.08	0.20	0.099	.	1500.	<0.005
L 410109A	0.24	<0.08	4.1	0.082	.	1800.	<0.005
L 410109B	0.45	<0.08	4.5	0.075	.	1900.	<0.005
L 410110A	0.34	<0.08	2.7	0.069	.	1800.	<0.005
L 410110B	0.36	<0.08	2.8	0.067	.	1900.	<0.005
L 410111A	0.32	<0.08	7.8	0.13	.	1900.	<0.005
L 410111B	0.39	<0.08	8.1	0.13	.	1900.	<0.005
L 410112A	1.6	.	1.5	0.21	.	700.	<0.005
L 410112B	2.1	.	4.3	0.22	.	690.	<0.005
L 410113A	1.6	.	3.3	0.33	.	790.	<0.005
L 410113B	1.7	.	3.2	0.32	.	780.	<0.005
L 410114A	1.8	.	2.1	0.22	.	760.	<0.005
L 410114B	2.1	.	2.2	0.22	.	760.	<0.005
L 410308A	0.072	.	0.20	0.12	<0.0005	730.	<0.008
L 410308B	0.13	.	0.40	0.078	0.0010	650.	<0.008
L 410309A	0.11	.	0.36	0.070	0.0010	730.	<0.008
L 410309B	0.076	.	0.37	0.068	<0.0005	710.	<0.008
L 410310A	0.17	.	0.58	0.044	0.0010	880.	<0.008
L 410310B	0.43	.	1.2	0.039	0.0020	870.	0.014
L 410312A	0.12	.	0.30	0.093	<0.0005	640.	<0.008
L 410312B	0.16	.	0.42	0.099	0.0010	640.	<0.008
L 410313A	0.22	.	0.30	0.30	<0.0005	770.	<0.008
L 410313B	0.075	.	0.19	0.28	<0.0005	730.	<0.008
L 410314A	0.054	.	0.21	0.089	<0.0005	640.	<0.008
L 410314B	0.072	.	0.31	0.078	<0.0005	670.	<0.008
L 771108A	1.2	<0.08	<0.004	0.037	.	150.	<0.005
L 771108B	0.45	<0.08	<0.004	0.043	.	180.	<0.005
L 772108A	2.4	<0.08	2.2	0.034	.	130.	<0.005
L 772108B	2.4	<0.08	2.1	0.036	.	110.	<0.005
L 773108A	3.4	0.35	0.48	0.021	.	92.	<0.005
L 773108B	3.1	0.38	0.42	0.022	.	95.	<0.005
L 774108A	4.6	0.53	0.69	0.020	.	81.	<0.005
L 774108B	3.3	0.57	0.57	0.017	.	75.	<0.005
L 775108A	4.6	0.19	0.80	0.019	.	64.	<0.005
L 775108B	4.6	0.38	1.4	0.030	.	73.	<0.005
L 776108A	5.3	0.43	0.89	0.016	.	52.	<0.005

	AL	AS	B	BA	BE	CA	CD
L 776108B	4.3	0.37	0.88	0.022	.	55.	<0.005
L 771109A	0.36	<0.08	<0.004	0.032	.	170.	<0.005
L 771109B	.	.	.	.	.	.	.
L 772109A	0.88	<0.08	<0.004	0.024	.	100.	<0.005
L 772109B	1.2	<0.08	<0.004	0.024	.	120.	<0.005
L 773109A	1.6	0.40	0.78	0.032	.	85.	<0.005
L 773109B	1.5	0.42	0.69	0.030	.	87.	<0.005
L 774109A	1.5	0.54	1.1	0.032	.	82.	<0.005
L 774109B	1.7	0.48	1.0	0.030	.	89.	<0.005
L 775109A	2.4	0.18	0.60	0.021	.	44.	<0.005
L 775109B	0.21	0.44	0.98	0.043	.	51.	<0.005
L 776109A	0.61	0.44	0.29	0.076	.	50.	<0.005
L 776109B	0.65	0.29	0.12	0.12	.	46.	<0.005
L 771110A	0.54	<0.08	<0.004	0.041	.	170.	<0.005
L 771110B	0.53	<0.08	<0.004	0.045	.	180.	<0.005
L 772110A	1.9	<0.08	<0.004	0.031	.	130.	<0.005
L 772110B	1.9	<0.08	<0.004	0.028	.	120.	<0.005
L 773110A	3.8	0.43	0.92	0.037	.	100.	<0.005
L 773110B	3.6	0.47	0.79	0.037	.	100.	<0.005
L 774110A	3.2	0.60	1.5	0.038	.	77.	<0.005
L 774110B	4.1	0.47	1.3	0.036	.	93.	<0.005
L 775110A	1.6	0.32	0.61	0.042	.	49.	<0.005
L 775110B	2.3	0.49	1.4	0.050	.	62.	<0.005
L 776110A	0.72	0.40	0.084	0.11	.	30.	<0.005
L 776110B	0.88	0.35	0.12	0.093	.	35.	<0.005
L 771111A	0.58	<0.08	0.21	0.056	.	150.	<0.005
L 771111B	0.34	<0.08	0.18	0.063	.	160.	<0.005
L 772111A	1.1	<0.08	0.70	0.030	.	140.	<0.005
L 772111B	0.87	<0.08	9.0	0.085	.	1000.	<0.005
L 773111A	0.69	0.58	0.61	0.053	.	38.	<0.005
L 773111B	0.88	0.54	0.55	0.051	.	40.	<0.005
L 774111A	<0.06	0.69	<0.004	0.082	.	19.	<0.005
L 774111B	0.41	0.37	<0.004	0.070	.	18.	<0.005
L 775111A	0.40	0.46	<0.004	0.073	.	9.5	<0.005
L 775111B	0.37	0.46	<0.004	0.072	.	8.4	<0.005
L 776111A	0.28	0.54	<0.004	0.086	.	10.	<0.005
L 776111B	0.34	0.51	<0.004	0.080	.	8.6	<0.005
L 711108A	0.64	<0.08	<0.004	0.021	.	120.	<0.005
L 711108B	0.65	<0.08	<0.004	0.033	.	120.	<0.005
L 711109A	0.32	<0.08	<0.004	0.028	.	150.	<0.005
L 711109B	0.37	<0.08	<0.004	0.033	.	140.	<0.005
L 711110A	0.61	<0.08	<0.004	0.041	.	120.	<0.005
L 711110B	1.0	<0.08	<0.004	0.040	.	110.	<0.005
L 711111A	0.67	<0.08	<0.004	0.032	.	120.	<0.005
L 711111B	.	.	.	.	.	.	.

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 170100*A	<0.15	9500.	<0.005	<0.005	6.9	0.24	0.80
L 170100*B	<0.15	9500.	0.13	<0.005	9.3	0.28	0.85
L 170100A	<0.15	9500.	0.20	<0.005	7.4	0.19	0.82
L 170100B	<0.15	9500.	0.054	<0.005	2.5	0.16	0.74
L 170100C	<0.15	9500.	<0.005	<0.005	2.6	0.10	0.91
L 170100D	<0.15	9700.	0.029	<0.005	2.6	0.39	0.77
L 170100E	<0.15	9500.	0.079	<0.005	2.0	0.21	0.72
L 170100F	<0.15	9500.	0.054	<0.005	2.4	0.25	0.67
L 170100W	1.7	8600.	0.14	0.065	*	0.15	1.0
L 170100X	1.4	2100.	0.12	0.043	*	0.072	1.2
L 170100Y	2.2	2200.	0.16	0.090	*	0.11	1.9
L 170100Z	1.2	8500.	0.12	0.033	*	0.088	1.2
L 170200A	2.1	7000.	1.3	0.12	*	0.43	3.3
L 170200B	2.8	7100.	1.1	0.16	*	0.14	3.0
L 170200C	2.3	6800.	1.0	0.12	*	0.12	3.0
L 170200D	2.2	8000.	1.3	0.14	*	0.31	3.8
L 170200E	2.2	5700.	1.3	0.13	*	0.63	2.4
L 170200F	1.8	7500.	1.1	0.097	*	0.17	3.0
L 170200G	2.4	8300.	1.3	0.14	*	0.45	3.3
L 170200H	2.9	7800.	1.3	0.18	*	0.71	3.9
L 170200I	2.6	7500.	1.0	0.14	*	0.11	2.8
L 170200J	2.2	7700.	1.4	0.13	*	0.53	3.1
L 170200K	2.2	6300.	1.3	0.13	*	0.34	2.1
L 170200L	1.8	7800.	1.3	0.10	*	0.29	3.3
L 170300*A	0.015	8400.	0.041	0.026	53.	0.056	0.27
L 170300*AA	0.11	8500.	0.16	0.19	51.	0.093	0.29
L 170300*B	0.015	8500.	0.039	0.022	53.	0.043	0.31
L 170300*BB	0.023	8200.	0.053	0.050	51.	0.17	0.23
L 170300*C	0.062	8300.	0.089	0.066	53.	0.041	0.18
L 170300*CC	0.035	3300.	0.064	0.063	51.	0.18	0.27
L 170300*D	0.029	8700.	0.048	0.031	53.	0.010	0.15
L 170300*E	0.042	8200.	0.070	0.053	47.	0.040	0.10
L 170300*F	0.040	8200.	0.065	0.048	48.	0.17	0.17
L 170300*H	0.10	8200.	0.16	0.17	53.	0.077	0.29
L 170300*I	0.13	8000.	0.20	0.21	54.	0.10	0.25
L 170300*J	0.085	8200.	0.13	0.14	49.	0.074	0.14
L 170300*K	0.13	8000.	0.19	0.20	54.	0.093	0.24
L 170300*L	0.13	8000.	0.19	0.19	48.	0.089	0.25
L 170300*M	0.12	8100.	0.18	0.19	47.	0.085	0.25
L 170300*N	0.10	8000.	0.15	0.16	45.	0.088	0.17
L 170300*O	0.072	8100.	0.11	0.12	45.	0.10	0.20
L 170300*P	0.098	7800.	0.15	0.22	51.	0.088	0.19
L 170300*Q	0.14	7800.	0.21	0.30	53.	0.13	0.19
L 170300*R	0.13	8300.	0.18	0.26	49.	0.10	0.24
L 170300*S	0.18	8300.	0.26	0.36	48.	0.13	0.17
L 170300*T	0.068	8300.	0.11	0.16	46.	0.083	0.24
L 170300*U	0.12	8300.	0.17	0.25	45.	0.11	0.22

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 170300•V	0.15	8300.	0.22	0.32	43.	0.12	0.25
L 170300•W	0.18	8200.	0.26	0.37	44.	0.13	0.26
L 170300•X	0.088	8500.	0.13	0.15	61.	0.081	0.16
L 170300•Y	0.074	8600.	0.12	0.13	62.	0.076	0.28
L 170300•Z	0.085	8200.	0.13	0.15	51.	0.074	0.24
L 170400•A	<0.03	7700.	<0.005	<0.005	23.	<0.04	0.11
L 170400•B	<0.03	7500.	<0.005	<0.005	24.	<0.04	0.15
L 170400A	<0.03	7700.	0.026	<0.005	23.	<0.04	0.11
L 170400B	<0.03	7500.	0.067	<0.005	24.	<0.04	0.15
L 170400C	<0.03	8300.	0.10	0.076	25.	<0.04	0.25
L 170400D	<0.03	8000.	0.10	0.084	23.	<0.04	0.18
L 120100A	<0.15	10000.	<0.005	<0.005	16.	0.23	1.1
L 120100B	<0.15	10000.	<0.005	<0.005	9.1	0.42	0.99
L 120100C	<0.15	10000.	<0.005	<0.005	7.8	0.22	0.92
L 120100D	•	10000.	•	•	6.7	•	0.91
L 120100E	<0.15	10000.	<0.005	<0.005	4.9	0.18	0.97
L 120100F	<0.15	98000.	<0.005	<0.005	7.2	0.20	0.91
L 110100A	<0.15	11000.	<0.005	<0.005	6.0	0.14	1.1
L 110100B	<0.15	11000.	<0.005	<0.005	•	0.16	1.1
L 110100C	<0.15	11000.	<0.005	<0.005	4.3	0.17	1.1
L 110100D	<0.15	11000.	<0.005	<0.005	5.7	0.48	1.1
L 110100E	<0.15	11000.	<0.005	<0.005	4.3	0.52	1.0
L 110100F	<0.15	11000.	<0.005	<0.005	4.3	0.60	1.1
L 470108A	<0.15	1400.	<0.005	0.67	•	0.68	0.24
L 470108B	<0.15	1800.	0.0068	0.012	•	0.055	0.22
L 470108C	0.031	1800.	0.081	0.065	•	0.47	0.21
L 470108D	0.088	2300.	0.17	0.14	•	0.98	0.28
L 571108A	1.4	4000.	0.059	0.088	•	0.25	0.29
L 571108B	0.51	4100.	0.020	0.035	•	0.060	0.27
L 572108A	1.4	5100.	0.059	0.088	•	0.036	0.38
L 572108B	0.95	5200.	0.039	0.059	•	0.028	0.33
L 573108A	0.83	5500.	0.041	0.053	•	0.049	0.27
L 573108B	1.6	5500.	0.072	0.099	•	0.062	0.29
L 574108A	1.0	5930.	0.070	0.065	•	0.088	0.28
L 574108B	0.70	6000.	0.044	0.044	•	0.056	0.29
L 575108A	1.4	6800.	0.097	0.080	•	0.093	0.37
L 575108B	2.0	6300.	0.12	0.12	•	0.10	0.38
L 576108A	2.5	6300.	0.15	0.15	•	0.22	0.52
L 576108B	2.1	6400.	0.13	0.12	•	0.095	0.28
L 671108A	0.022	1600.	0.059	0.043	•	0.54	0.61

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 671108B	0.080	1600.	0.15	0.13	•	0.25	0.61
L 672108A	0.0090	1600.	0.033	0.025	•	0.012	0.36
L 672108B	0.075	1700.	0.13	0.11	•	0.071	0.31
L 673108A	0.025	1900.	0.046	0.036	•	0.048	0.29
L 673108B	0.069	1900.	0.12	0.10	•	0.048	0.29
L 674108A	0.056	1900.	0.10	0.084	•	0.062	0.22
L 674108B	0.0080	1900.	0.020	0.012	•	0.057	0.25
L 675108A	<0.006	2000.	0.013	0.0050	•	0.12	0.20
L 675108B	0.046	2100.	0.088	0.070	•	0.14	0.20
L 470109A	<0.15	4200.	0.17	<0.005	10.	0.095	0.95
L 470109B	<0.15	4200.	<0.005	<0.005	9.2	0.10	0.93
L 470109C	0.25	2400.	0.012	0.014	•	0.014	0.45
L 470109D	0.55	3100.	0.024	0.034	•	0.0059	0.50
L 571109A	0.86	4100.	0.036	0.050	•	0.020	0.50
L 571109B	0.68	5200.	0.028	0.040	•	0.0043	0.46
L 571109C	•	•	•	•	•	•	•
L 571109D	•	•	•	•	•	•	•
L 572109A	2.8	5000.	0.084	0.11	•	0.054	0.50
L 572109B	3.7	5900.	0.16	0.21	•	0.11	0.41
L 572109C	•	•	•	•	•	•	•
L 572109D	•	•	•	•	•	•	•
L 573109A	1.6	5400.	0.069	0.092	•	0.039	0.36
L 573109B	4.1	7000.	0.18	0.24	•	0.12	0.36
L 573109C	•	•	•	•	•	•	•
L 573109D	•	•	•	•	•	•	•
L 574109A	0.70	6000.	0.029	0.038	•	0.0049	0.35
L 574109B	1.3	6800.	0.053	0.073	•	0.027	0.42
L 574109C	•	•	•	•	•	•	•
L 574109D	•	•	•	•	•	•	•
L 575109A	1.6	6400.	0.082	0.10	•	0.077	0.37
L 575109B	1.4	7200.	0.071	0.081	•	0.060	0.34
L 576109A	2.2	6700.	0.10	0.12	•	0.096	0.43
L 576109B	2.2	6500.	0.11	0.13	•	0.092	0.45
L 671109A	3.1	2100.	0.14	0.18	•	0.11	1.4
L 671109B	3.1	2200.	0.13	0.18	•	0.097	1.6
L 672109A	8.3	2300.	0.35	0.52	•	1.0	0.56
L 672109B	8.6	2400.	0.36	0.53	•	0.80	0.52
L 672109D	•	•	•	•	•	•	•
L 672109E	•	•	•	•	•	•	•
L 673109A	2.9	2600.	0.088	0.80	•	7.5	0.84
L 673109B	3.8	2500.	0.14	0.74	•	6.0	0.86
L 674109A	11.	2900.	0.45	0.92	•	2.7	1.2
L 674109B	3.3	2700.	0.090	1.4	•	8.3	1.2
L 675109A	3.9	2900.	0.11	1.9	•	10.	1.7

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 675109B	3.8	3100.	0.10	2.0	.	10.	1.6
L 470110A	0.81	2500.	0.036	0.049	.	0.031	0.26
L 470110B	1.2	3000.	0.055	0.072	.	0.031	0.33
L 470110C	0.018	2300.	0.046	0.034	.	0.83	0.26
L 470110D	0.025	3600.	0.050	0.041	.	0.77	0.26
L 571110A	1.0	4600.	0.042	0.058	.	0.38	0.31
L 571110B	1.0	4500.	0.041	0.058	.	0.050	0.38
L 572110A	1.2	6600.	0.054	0.068	.	0.022	0.41
L 572110B	2.7	4600.	0.12	0.15	.	0.080	0.34
L 573110A	4.2	7500.	0.18	0.25	.	0.17	0.34
L 573110B	1.8	7300.	0.080	0.10	.	0.078	.
L 574110A	1.3	7000.	0.055	0.077	.	0.033	0.43
L 574110B	3.1	7000.	0.13	0.18	.	0.092	0.41
L 575110A	2.1	7500.	0.090	0.13	.	0.11	0.37
L 575110B	2.0	6100.	0.095	0.12	.	0.15	0.37
L 576110A	3.2	6300.	0.17	0.19	.	0.14	0.42
L 576110B	3.0	6600.	0.16	0.17	.	0.13	0.31
L 671110A	<0.006	1700.	0.016	0.010	.	0.76	0.26
L 671110B	0.011	1700.	0.029	0.026	.	0.21	0.28
L 672110A	<0.006	2100.	<0.001	<0.001	.	<0.068	0.44
L 672110B	0.014	2100.	0.032	0.024	.	0.032	0.44
L 673110A	0.028	2200.	0.039	0.023	.	0.17	0.34
L 673110B	0.035	2300.	0.032	0.023	.	0.22	0.36
L 674110A	0.026	2300.	0.029	0.011	.	0.12	0.36
L 674110B	0.045	2400.	0.046	0.033	.	0.073	0.36
L 675110A	0.029	2500.	0.017	0.0040	.	0.13	0.37
L 675110B	0.029	2400.	0.030	0.012	.	0.10	0.35
L 470111A	<0.15	.	0.049	<0.005	.	0.15	.
L 470111B	<0.15	.	<0.005	<0.005	.	0.27	.
L 671111A	<0.15	.	<0.005	<0.005	.	0.11	.
L 671111B	<0.15	.	0.12	<0.005	.	0.14	.
L 470112A	1.3	1700.	0.083	0.11	.	0.040	0.61
L 470112B	1.3	1500.	0.084	0.11	.	0.078	0.64
L 470112C	<0.006	2200.	0.039	0.032	.	0.51	0.55
L 470112D	<0.006	2300.	0.053	0.042	.	1.1	0.58
L 571112A	0.44	2300.	0.052	0.055	.	0.035	0.32

	CO	CONDUCTIVITY	CR	CU	CU	FE	FL
L 5711128	0.62	2900.	0.059	0.065	.	0.10	0.43
L 5721124	0.81	4000.	0.073	0.072	.	0.039	0.39
L 5721128	0.59	3800.	0.063	0.060	.	0.043	0.47
L 5731124	1.4	4700.	0.096	0.10	.	0.11	.
L 5731128	3.1	4100.	0.17	0.20	.	0.14	0.40
L 5741124	0.61	4500.	0.062	0.057	.	0.093	0.32
L 5741128	1.1	4900.	0.084	0.083	.	0.12	0.36
L 5751124	1.7	4700.	0.12	0.12	.	0.17	0.67
L 5751128	2.8	5600.	0.13	0.13	.	0.15	0.48
L 5761124	2.8	5500.	0.16	0.18	.	0.27	0.47
L 5761128	2.9	5900.	0.17	0.18	.	0.17	0.53
L 671112A	<0.006	1600.	0.031	<0.001	.	0.49	1.7
L 671112B	<0.006	1600.	0.047	0.014	.	0.029	1.7
L 672112A	<0.006	1500.	0.042	0.0080	.	0.021	1.2
L 672112B	<0.006	1500.	0.019	<0.001	.	<0.008	1.2
L 673112A	<0.006	1600.	0.013	<0.001	.	0.015	0.96
L 673112B	<0.006	1600.	0.033	0.0050	.	0.19	0.99
L 674112A	<0.006	1600.	0.0090	<0.001	.	0.066	0.90
L 674112B	<0.006	1600.	0.027	0.0040	.	0.47	0.89
L 675112A	<0.006	1600.	0.011	<0.001	.	0.55	0.71
L 675112B	<0.006	1600.	0.026	0.0060	.	0.13	0.92
L 670113A	1.3	1500.	0.090	0.087	.	0.095	0.30
L 670113B	1.8	1600.	0.11	0.12	.	0.26	0.23
L 670113C	<0.006	1800.	0.048	0.020	.	0.61	0.23
L 670123D	<0.006	1400.	0.046	0.019	.	0.48	0.26
L 571113A	0.79	5300.	0.071	0.052	.	0.16	0.28
L 571113B	2.2	4900.	0.13	0.14	.	0.12	0.40
L 572113A	9.2	6500.	0.40	0.53	.	0.32	0.38
L 572113B	7.8	6500.	0.35	0.45	.	0.39	0.42
L 573113A	4.3	6800.	0.21	0.25	.	0.24	0.40
L 573113B	6.5	7000.	0.30	0.37	.	0.24	0.38
L 574113A	1.1	6600.	0.088	0.063	.	0.26	0.31
L 574113B	1.5	6800.	0.10	0.086	.	0.55	0.38
L 575113A	1.9	7200.	0.12	0.11	.	0.48	0.31
L 575113B	1.8	7500.	0.12	0.10	.	0.26	0.43
L 576113A	2.7	7000.	0.16	0.15	.	0.40	.
L 576113B	2.4	7300.	0.15	0.14	.	0.50	.
L 671113A	<0.006	1200.	0.047	0.015	.	0.68	0.40
L 671113B	<0.006	1300.	0.042	0.012	.	1.7	0.41
L 672113A	<0.006	1300.	0.011	0.0030	.	0.045	0.13
L 672113B	<0.006	1300.	0.0040	0.0020	.	0.73	0.14
L 673113A	<0.006	1800.	0.0040	0.0050	.	0.16	0.090

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 673113B	<0.006	1800.	<0.001	<0.001	•	0.13	0.090
L 674113A	0.0080	1200.	0.0090	0.0060	•	0.047	0.10
L 674113B	<0.006	1200.	0.0010	<0.001	•	0.46	0.10
L 675113A	0.013	1300.	0.0080	0.0050	•	0.078	0.090
L 675113B	0.0070	1100.	0.0020	<0.001	•	0.050	0.090
L 670114A	2.2	1300.	0.095	0.13	•	0.060	0.78
L 670114B	2.4	2100.	0.10	0.14	•	0.12	0.61
L 670114C	3.0	3900.	0.13	0.17	•	0.095	0.72
L 670114D	3.8	3200.	0.17	0.22	•	0.12	0.43
L 671114A	2.5	6400.	0.12	0.14	•	0.11	0.78
L 671114B	7.2	6400.	0.31	0.42	•	0.23	0.82
L 672114A	2.1	7200.	0.12	0.12	•	0.076	•
L 672114B	2.3	7300.	0.12	0.13	•	0.071	0.88
L 673114A	8.7	7200.	0.38	0.50	•	0.28	•
L 673114B	7.2	7400.	0.32	0.42	•	0.24	0.58
L 674114A	3.2	7000.	0.16	0.18	•	0.10	•
L 674114B	1.6	6800.	0.10	0.090	•	0.079	0.53
L 675114A	2.3	7800.	0.15	0.13	•	0.12	•
L 675114B	1.9	7500.	0.13	0.096	•	0.10	0.71
L 676114A	2.7	7600.	0.17	0.15	•	0.16	0.59
L 676114B	2.7	8000.	0.17	0.15	•	0.14	0.58
L 671114A	0.74	1500.	0.032	0.042	•	0.017	0.65
L 671114B	7.8	1500.	0.33	0.45	•	0.26	0.59
L 672114A	0.51	1500.	0.030	0.029	•	0.10	0.81
L 672114B	0.51	1500.	0.033	0.019	•	0.058	0.90
L 673114A	0.80	1700.	0.047	0.042	•	0.050	0.71
L 673114B	0.68	1600.	0.042	0.037	•	0.050	1.1
L 674114A	0.59	1400.	0.037	0.031	•	0.22	1.1
L 674114B	0.73	1600.	0.047	0.040	•	0.10	1.0
L 675114A	•	1500.	•	•	•	•	1.0
L 675114B	•	1500.	•	•	•	•	0.96
L 670308A	0.048	2900.	0.055	0.060	56.	0.039	0.30
L 670308B	0.035	2800.	0.055	0.064	52.	0.038	0.22
L 670308C	•	2600.	•	•	51.	•	0.26
L 670308D	•	2600.	•	•	50.	•	0.26
L 671308A	0.0060	5100.	0.017	0.018	53.	0.0080	0.30
L 671308B	0.016	5200.	0.032	0.027	54.	0.073	0.25
L 672308A	0.053	6300.	0.085	0.094	48.	0.25	0.31
L 672308B	0.054	6200.	0.11	0.092	53.	0.093	0.30
L 673308A	0.077	6500.	0.12	0.13	50.	0.14	0.21

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 573308B	0.077	6500.	0.11	0.12	51.	0.16	0.2
L 574308A	0.080	7000.	0.12	0.13	48.	0.082	0.2
L 574308B	0.088	7000.	0.13	0.13	48.	0.14	0.27
L 575308A	0.072	7300.	0.11	0.11	48.	0.10	0.21
L 575308B	0.077	7300.	0.12	0.13	49.	0.064	0.24
L 576308A	0.055	6600.	0.090	0.12	52.	0.10	0.31
L 576308B	0.074	6500.	0.11	0.16	54.	0.092	0.31
L 577306A	0.075	7600.	0.11	0.15	48.	0.087	0.32
L 577308B	0.058	7600.	0.097	0.13	48.	0.044	0.27
L 578308A	0.091	7000.	0.14	0.19	44.	0.085	0.28
L 578308B	0.083	7200.	0.13	0.17	44.	0.078	0.26
L 579308A	0.15	6900.	0.21	0.31	35.	0.14	0.35
L 579308B	0.089	7200.	0.13	0.19	35.	0.074	0.21
L 671308A	0.032	1500.	0.051	0.052	49.	0.080	0.63
L 671308B	0.040	1500.	0.062	0.062	49.	0.22	0.61
L 672308A	0.032	1700.	0.045	0.044	47.	0.032	0.37
L 672308B	0.029	1700.	0.045	0.045	47.	0.030	0.37
L 673308A	0.024	1400.	0.040	0.044	55.	0.034	0.29
L 673308B	0.031	14000.	0.051	0.059	54.	0.040	0.29
L 674308A	0.045	1800.	0.058	0.076	47.	0.057	0.29
L 674308B	0.017	1800.	0.031	0.036	47.	0.049	0.32
L 675308A	0.057	1900.	0.063	0.076	49.	0.084	0.26
L 675308B	0.054	1800.	0.061	0.072	49.	0.070	0.35
L 470309A	0.018	3600.	0.019	0.012	52.	<0.008	2.8
L 470309B	<0.006	3600.	0.0040	0.0070	52.	<0.008	1.8
L 470309C	0.11	2600.	0.16	0.23	52.	0.078	0.44
L 470309D	0.047	2700.	0.073	0.10	54.	0.045	0.41
L 571309A	<0.006	5400.	0.0060	0.0080	53.	<0.008	0.90
L 571309B	<0.006	5400.	0.012	0.014	53.	<0.008	0.48
L 572309A	0.074	6300.	0.086	0.12	47.	0.063	0.49
L 572309B	0.087	6300.	0.13	0.13	47.	0.058	0.51
L 573309A	0.10	6500.	0.15	0.16	49.	0.069	0.30
L 573309B	0.11	6400.	0.16	0.18	49.	0.098	0.36
L 574309A	0.091	7200.	0.13	0.14	48.	0.064	0.30
L 574309B	0.085	7100.	0.13	0.13	48.	0.060	0.31
L 575309A	0.072	7200.	0.11	0.13	49.	0.067	0.29
L 575309B	0.064	7300.	0.11	0.10	49.	0.053	0.31
L 576309A	0.074	6600.	0.12	0.16	51.	0.070	0.30
L 576309B	0.071	6500.	0.11	0.15	52.	0.056	0.29
L 577309A	0.12	7600.	0.18	0.25	47.	0.084	0.34
L 577309B	0.056	7500.	0.088	0.12	47.	0.060	0.31
L 578309A	0.14	7500.	0.21	0.29	43.	0.10	0.27
L 578309B	0.11	7400.	0.16	0.23	43.	0.077	0.28
L 579309A	0.13	7500.	0.20	0.28	36.	0.092	0.13

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 579309B	0.13	7500.	0.19	0.27	35.	0.090	0.13
L 671309A	0.065	1800.	0.097	0.13	47.	0.050	1.2
L 671309B	0.055	1800.	0.085	0.11	47.	0.058	1.2
L 672309A	0.47	1800.	0.093	0.16	49.	0.38	0.21
L 672309B	0.49	1900.	0.12	0.21	48.	0.28	0.25
L 673309A	0.94	2300.	0.094	0.47	41.	3.7	0.33
L 673309B	0.99	2300.	0.089	0.52	36.	3.7	0.37
L 674309A	1.7	2400.	0.059	0.97	55.	5.6	0.75
L 674309B	1.7	2400.	0.052	1.0	55.	6.8	0.57
L 675309A	2.0	2600.	0.045	1.3	61.	5.1	0.73
L 675309B	2.0	2700.	0.044	1.2	60.	5.1	0.94
L 670310A	0.0080	4600.	0.018	0.015	55.	<0.088	0.44
L 670310B	0.015	4600.	0.027	0.020	52.	0.010	0.39
L 670310C	0.023	3600.	0.043	0.053	40.	0.019	0.31
L 670310D	0.043	3700.	0.064	0.084	42.	0.028	0.45
L 671310A	<0.006	6300.	0.011	0.019	53.	0.080	1.5
L 671310B	<0.006	5700.	0.0090	0.011	56.	<0.008	0.34
L 672310A	0.061	6800.	0.096	0.10	47.	0.072	0.28
L 672310B	0.054	6800.	0.085	0.093	47.	0.085	0.22
L 673310A	0.10	6900.	0.16	0.17	50.	0.19	0.28
L 673310B	0.095	6900.	0.14	0.15	49.	0.18	0.25
L 674310A	0.072	7300.	0.11	0.11	48.	0.081	0.27
L 674310B	0.083	7000.	0.13	0.13	48.	0.070	0.29
L 675310A	0.048	7400.	0.084	0.082	50.	0.064	0.20
L 675310B	0.078	7500.	0.11	0.11	49.	0.084	0.20
L 676310A	0.094	6400.	0.14	0.20	51.	0.26	0.30
L 676310B	0.14	6700.	0.20	0.28	52.	0.13	0.31
L 677310A	0.11	7900.	0.16	0.23	45.	0.16	0.27
L 677310B	0.098	7900.	0.14	0.21	45.	0.13	0.28
L 678310A	0.15	7300.	0.22	0.31	42.	0.14	0.20
L 678310B	0.069	7300.	0.11	0.15	42.	0.10	0.27
L 679310A	0.10	7400.	0.15	0.21	39.	0.13	0.10
L 679310B	0.13	7700.	0.19	0.27	37.	0.14	0.17
L 671310A	0.012	1800.	0.022	0.020	56.	0.058	0.13
L 671310B	0.011	1800.	0.018	0.021	55.	0.033	0.25
L 672310A	0.012	1900.	0.024	0.025	62.	0.087	0.39
L 672310B	0.012	1900.	0.024	0.019	61.	0.091	0.41
L 673310A	0.034	2100.	0.032	0.033	53.	0.21	0.35
L 673310B	0.034	2200.	0.030	0.022	51.	0.11	0.36
L 674310A	0.044	2300.	0.027	0.018	51.	0.11	0.32
L 674310B	0.050	2300.	0.040	0.032	52.	0.067	0.27
L 675310A	0.070	2500.	0.049	0.048	51.	0.18	0.55

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 675310B	0.073	2500.	0.054	0.049	51.	0.10	0.31
L 470312A	<0.006	2500.	0.010	0.039	56.	0.028	0.31
L 470312B	<0.006	2400.	0.012	0.041	53.	0.26	0.49
L 470312C	0.0080	2200.	0.015	0.039	56.	0.28	0.37
L 470312D	<0.006	2200.	0.0080	0.037	55.	0.30	0.50
L 571312A	0.0070	3900.	0.017	0.037	48.	0.0080	0.27
L 571312B	<0.006	4600.	<0.001	0.032	48.	<0.008	0.35
L 572312A	0.058	5100.	0.091	0.12	53.	0.049	0.48
L 572312B	0.067	5100.	0.10	0.13	54.	0.044	0.58
L 573312A	0.083	6000.	0.12	0.14	49.	0.092	0.39
L 573312B	0.081	5900.	0.12	0.15	50.	0.071	0.39
L 574312A	0.069	6300.	0.11	0.13	47.	0.073	0.37
L 574312B	0.089	6500.	0.14	0.16	48.	0.075	0.40
L 575312A	0.073	6800.	0.11	0.13	46.	0.065	0.35
L 575312B	0.076	6700.	0.11	0.13	47.	0.058	0.43
L 576312A	0.10	6000.	0.15	0.22	52.	0.12	0.36
L 576312B	0.097	6000.	0.15	0.21	52.	0.091	0.38
L 577312A	0.10	7600.	0.15	0.21	45.	0.11	0.30
L 577312B	0.12	7600.	0.17	0.25	43.	0.13	0.32
L 578312A	0.11	7100.	0.17	0.25	41.	0.098	0.33
L 578312B	0.068	7100.	0.11	0.17	40.	0.065	0.31
L 579312A	0.10	7500.	0.16	0.22	42.	0.11	0.11
L 579312B	0.14	7400.	0.21	0.29	42.	0.12	0.23
L 671312A	0.0080	1500.	0.014	0.020	64.	0.23	1.5
L 671312B	0.010	1500.	0.014	0.013	65.	0.050	1.4
L 672312A	<0.006	1400.	0.010	0.0080	53.	0.14	1.2
L 672312B	<0.006	1400.	0.010	0.0090	51.	0.18	1.2
L 673312A	<0.006	1400.	0.0070	0.0040	53.	0.13	1.0
L 673312B	<0.006	1400.	0.011	0.0070	53.	0.15	0.99
L 674312A	<0.006	1500.	0.0090	0.0030	54.	0.063	1.0
L 674312B	<0.006	1500.	0.0080	0.0050	55.	0.093	0.99
L 675312A	<0.006	1600.	0.0060	0.0020	55.	0.062	0.92
L 675312B	<0.006	1600.	0.0070	<0.001	54.	0.068	0.89
L 470313A	<0.006	3700.	0.020	0.025	52.	0.063	2.1
L 470313B	<0.006	3800.	0.017	0.024	53.	0.19	1.1
L 470313C	<0.006	3500.	0.017	0.024	53.	0.070	0.21
L 470313D	0.0060	3600.	0.021	0.035	52.	0.21	0.23
L 571313A	<0.006	6300.	0.0090	0.023	53.	0.082	0.47
L 571313B	0.0080	6200.	0.021	0.029	51.	0.028	0.39
L 572313A	0.057	7200.	0.090	0.098	53.	0.24	0.40

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 572313B	0.063	7200.	0.098	0.11	53.	0.18	0.40
L 573313A	0.15	7400.	0.22	0.24	49.	0.13	0.27
L 573313B	0.10	7500.	0.16	0.17	50.	0.12	0.28
L 574313A	0.092	7300.	0.14	0.15	48.	0.080	0.36
L 574313B	0.091	7400.	0.14	0.15	48.	0.092	0.39
L 575313A	0.068	7500.	0.11	0.11	46.	0.22	0.21
L 575313B	0.065	7500.	0.11	0.11	45.	0.12	0.28
L 576313A	0.15	6400.	0.22	0.30	51.	0.15	0.19
L 576313B	0.11	6300.	0.16	0.22	51.	0.23	0.21
L 577313A	0.11	8000.	0.17	0.23	42.	0.15	0.28
L 577313B	0.14	8000.	0.20	0.28	42.	0.27	0.27
L 578313A	0.12	7500.	0.18	0.26	48.	0.11	0.27
L 578313B	0.11	7400.	0.16	0.22	49.	0.20	0.23
L 579313A	0.13	7700.	0.19	0.26	44.	0.23	0.090
L 579313B	0.085	7600.	0.13	0.18	43.	0.13	0.11
L 671313A	<0.006	1300.	0.013	0.022	53.	0.13	0.24
L 671313B	<0.006	1300.	0.013	0.021	56.	0.083	0.21
L 672313A	<0.006	1200.	0.014	<0.001	53.	0.030	0.28
L 672313B	<0.006	1200.	0.012	0.0060	54.	0.32	0.21
L 673313A	<0.006	1200.	0.0090	0.0030	54.	0.060	0.14
L 673313B	0.0090	1200.	0.016	0.0080	55.	0.029	0.060
L 674313A	<0.006	1100.	0.0030	<0.001	52.	0.069	0.14
L 674313B	0.011	1100.	0.011	0.0070	51.	0.020	0.21
L 675313A	0.016	1200.	0.0060	<0.001	51.	0.041	0.12
L 675313B	0.017	1100.	0.0040	<0.001	51.	0.018	0.12
L 470314A	<0.006	4900.	<0.001	0.0080	56.	<0.008	0.72
L 470314B	<0.006	4900.	<0.001	0.0070	56.	<0.008	0.73
L 470314C	0.0090	4000.	0.019	0.017	54.	0.0090	0.65
L 470314D	0.0060	4100.	0.020	0.024	54.	0.011	0.66
L 571314A	0.022	7200.	0.038	0.027	49.	0.024	0.47
L 571314B	0.010	6800.	0.024	0.023	49.	<0.008	0.42
L 572314A	0.11	7700.	0.16	0.18	47.	0.024	0.66
L 572314B	0.076	7000.	0.12	0.13	47.	0.070	0.69
L 573314A	0.11	7600.	0.17	0.18	48.	0.086	0.46
L 573314B	0.12	7600.	0.17	0.18	49.	0.10	0.49
L 574314A	0.11	7600.	0.17	0.17	49.	0.085	0.52
L 574314B	0.098	7600.	0.14	0.14	48.	0.069	0.50
L 575314A	0.077	8000.	0.12	0.12	47.	0.066	0.41
L 575314B	0.089	7800.	0.13	0.14	45.	0.065	0.41
L 576314A	0.11	6400.	0.16	0.23	51.	0.11	0.45
L 576314B	0.11	6400.	0.16	0.21	51.	0.083	0.35
L 577314A	0.14	8500.	0.20	0.29	45.	0.12	0.37
L 577314B	0.17	8300.	0.23	0.33	47.	0.14	0.34
L 578314A	0.088	7800.	0.13	0.18	49.	0.069	0.36

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 578314B	0.16	7800.	0.23	0.32	51.	0.11	0.40
L 579314A	0.15	8300.	0.23	0.32	37.	0.11	0.11
L 579314B	0.098	8100.	0.15	0.22	35.	0.076	0.19
L 671314A	<0.006	1900.	0.0040	<0.001	59.	0.015	0.53
L 671314B	<0.006	1800.	0.0070	<0.001	60.	<0.008	0.47
L 672314A	<0.006	1300.	0.0060	<0.001	62.	0.017	0.89
L 672314B	<0.006	1300.	0.0060	<0.001	63.	0.062	0.91
L 673314A	<0.006	1400.	<0.001	<0.001	63.	0.013	1.3
L 673314B	<0.006	1400.	0.0020	<0.001	63.	0.0090	1.6
L 674314A	<0.006	1500.	<0.001	<0.001	67.	<0.008	1.2
L 674314B	<0.006	1500.	<0.001	<0.001	66.	0.013	1.2
L 675314A	<0.006	1400.	<0.001	<0.001	68.	<0.008	1.1
L 675314B	<0.006	1300.	<0.001	<0.001	68.	<0.008	1.1
L 470408A	<0.03	2500.	0.011	<0.005	10.	<0.04	0.12
L 470408B	<0.03	2400.	<0.005	<0.005	9.3	<0.04	0.19
L 470409A	<0.03	3400.	<0.005	<0.005	13.	<0.04	0.17
L 470409B	<0.03	3300.	<0.005	<0.005	9.3	<0.04	0.37
L 470410A	<0.03	4000.	<0.005	<0.005	6.2	0.14	0.16
L 470410B	<0.03	3800.	0.016	<0.005	6.2	0.084	0.26
L 470412A	<0.03	2500.	0.015	<0.005	7.0	<0.04	0.36
L 470412B	<0.03	2500.	<0.005	<0.005	5.4	<0.04	0.37
L 470413A	<0.03	3300.	<0.005	<0.005	5.4	<0.03	0.22
L 470413B	<0.03	3200.	<0.005	<0.005	5.4	<0.03	0.21
L 470414A	<0.03	4100.	<0.005	<0.005	8.5	<0.04	0.58
L 470414B	<0.03	4200.	<0.005	<0.005	7.8	<0.04	0.43
L 420108A	0.77	4000.	0.051	.	.	0.088	0.20
L 420108B	0.89	4100.	0.061	0.021	.	0.092	0.20
L 420109A	2.0	4600.	0.079	0.077	.	0.098	0.69
L 420109B	1.4	4500.	0.056	0.046	.	0.074	0.52
L 420110A	1.7	5400.	0.070	0.064	.	0.14	0.75
L 420110B	2.6	5700.	0.10	0.12	.	0.14	0.71
L 420112A	0.89	3700.	0.072	0.042	.	0.073	0.65
L 420112B	1.4	3700.	0.088	0.070	.	0.14	0.64
L 420113A	1.4	5000.	0.095	0.062	.	0.15	0.46
L 420113B	1.5	4800.	0.10	0.067	.	0.13	0.53
L 420114A	1.3	5600.	0.071	0.042	.	0.085	0.86
L 420114B	1.8	5500.	0.095	0.070	.	0.078	0.81
L 420308A	<0.006	3900.	0.016	0.010	46.	0.027	0.23
L 420308B	<0.006	3700.	0.022	0.024	46.	0.0080	0.20
L 420309A	0.0090	4100.	0.028	0.021	45.	0.0080	0.46
L 420309B	0.013	4100.	0.029	0.029	44.	0.021	0.55
L 420310A	0.017	5000.	0.032	0.038	49.	0.058	0.28

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 420310B	0.016	5200.	0.036	0.034	50.	0.015	0.28
L 420312A	0.012	3400.	0.026	0.046	49.	0.029	0.61
L 420312B	<0.006	3500.	0.012	0.033	50.	0.031	0.68
L 420313A	<0.006	3700.	0.012	0.022	50.	0.15	0.25
L 420313B	<0.006	4600.	0.016	0.024	50.	0.046	0.30
L 420314A	<0.006	4800.	0.0090	0.0040	50.	0.13	0.66
L 420314B	<0.006	4700.	0.012	0.011	50.	<0.008	0.67
L 410108A	<0.15	5200.	0.27	<0.005	2.5	0.24	0.42
L 410108B	<0.15	5200.	0.070	<0.005	11.	0.41	0.32
L 410109A	<0.15	5400.	<0.005	<0.005	2.8	0.13	0.84
L 410109B	<0.15	5400.	<0.005	<0.005	2.6	0.21	.
L 410110A	<0.15	6500.	0.026	<0.005	<1.0	0.15	0.45
L 410110B	<0.15	6400.	<0.005	<0.005	10.	0.26	0.54
L 410111A	<0.15	.	<0.005	<0.005	.	0.15	.
L 410111B	<0.15	.	<0.005	<0.005	.	0.17	.
L 410112A	2.2	4180.	0.12	0.13	.	0.14	0.79
L 410112B	3.0	4100.	0.15	0.16	.	0.19	0.78
L 410113A	2.2	5200.	0.13	0.11	.	0.21	0.50
L 410113B	2.6	5200.	0.14	0.13	.	0.18	0.56
L 410114A	2.7	5700.	0.14	0.12	.	0.11	0.64
L 410114B	2.9	5800.	0.14	0.13	.	0.17	0.62
L 410308A	<0.006	4600.	0.018	0.014	51.	0.023	0.28
L 410308B	0.013	4600.	0.030	0.023	51.	0.018	.
L 410309A	0.0070	4400.	0.022	0.017	51.	<0.008	0.51
L 410309B	<0.006	4400.	0.024	0.018	51.	<0.008	0.53
L 410310A	0.012	5900.	0.036	0.029	49.	0.036	0.29
L 410310B	0.028	5900.	0.055	0.062	48.	0.042	0.41
L 410312A	<0.006	3600.	0.020	0.036	49.	0.024	0.31
L 410312B	0.0090	3600.	0.024	0.040	49.	0.028	0.61
L 410313A	0.0080	5000.	0.024	0.037	49.	0.16	0.42
L 410313B	<0.006	4800.	0.020	0.025	48.	0.040	0.42
L 410314A	0.0060	4800.	0.018	0.013	51.	0.030	0.59
L 410314B	0.0090	5000.	0.023	0.018	51.	0.011	0.64
L 771108A	<0.15	950.	0.15	<0.005	<1.0	1.2	0.32
L 771108B	<0.15	1000.	<0.005	<0.005	<1.0	0.033	0.37
L 772108A	<0.15	710.	0.18	<0.005	<1.0	0.071	0.38
L 772108B	<0.15	720.	0.11	<0.005	<1.0	0.050	0.22
L 773108A	<0.15	550.	<0.005	<0.005	<1.0	0.057	0.34
L 773108B	<0.15	560.	<0.005	<0.005	<1.0	0.021	0.38
L 774108A	<0.15	430.	<0.005	<0.005	<1.0	0.19	.
L 774108B	<0.15	400.	<0.005	<0.005	<1.0	0.078	.
L 775108A	<0.15	380.	0.016	<0.005	<1.0	0.051	.
L 775108B	<0.15	400.	0.0085	0.018	<1.0	0.0898	.
L 776108A	<0.15	.	<0.005	0.0070	.	0.41	.

	CO	CONDUCTIVITY	CR	CU	CL	FE	FL
L 776108B	<0.15	.	<0.005	<0.005	.	0.90	.
L 771109A	<0.15	1300.	0.22	<0.005	<1.0	0.049	0.56
L 771109B	.	1300.	.	.	<1.0	.	0.50
L 772109A	<0.15	750.	0.15	<0.005	<1.0	0.057	0.41
L 772109B	<0.15	730.	0.0066	<0.005	<1.0	0.081	0.41
L 773109A	<0.15	550.	<0.005	0.018	.	0.0063	.
L 773109B	<0.15	560.	<0.005	<0.005	.	<0.004	.
L 774109A	<0.15	360.	<0.005	<0.005	.	0.0074	.
L 774109B	<0.15	380.	<0.005	<0.005	.	0.015	.
L 775109A	<0.15	320.	0.038	<0.005	.	0.014	.
L 775109B	<0.15	260.	<0.005	0.021	.	<0.004	.
L 776109A	<0.15	.	<0.005	0.019	.	0.042	.
L 776109B	<0.15	.	0.021	0.018	.	0.12	.
L 771110A	<0.15	1200.	0.069	<0.005	<1.0	0.12	0.42
L 771110B	<0.15	1200.	<0.005	<0.005	<1.0	0.28	0.47
L 772110A	<0.15	770.	0.12	<0.005	<1.0	0.077	0.25
L 772110B	<0.15	770.	0.16	<0.005	<1.0	0.066	0.25
L 773110A	<0.15	580.	<0.005	<0.005	<1.0	<0.004	0.37
L 773110B	<0.15	610.	<0.005	<0.005	<1.0	0.020	0.37
L 774110A	<0.15	400.	<0.005	<0.005	<1.0	0.13	.
L 774110B	<0.15	400.	<0.005	<0.005	<1.0	0.16	.
L 775110A	<0.15	280.	<0.005	<0.005	<1.0	0.023	.
L 775110B	<0.15	330.	<0.005	0.015	<1.0	0.018	.
L 776110A	<0.15	.	0.0088	0.013	.	0.29	0.15
L 776110B	<0.15	.	0.021	0.026	.	0.24	0.15
L 771111A	<0.15	1100.	0.15	<0.005	<1.0	0.074	0.58
L 771111B	<0.15	1100.	<0.005	<0.005	<1.0	0.036	0.67
L 772111A	<0.15	610.	0.039	<0.005	<1.0	0.022	0.38
L 772111B	<0.15	620.	0.056	<0.005	<1.0	0.11	0.38
L 773111A	<0.15	210.	<0.005	0.013	<1.0	<0.004	0.34
L 773111B	<0.15	220.	<0.005	0.0089	<1.0	<0.004	0.37
L 774111A	<0.15	110.	<0.005	0.014	<1.0	0.16	.
L 774111B	<0.15	110.	0.023	0.012	<1.0	0.097	.
L 775111A	<0.15	60.	0.022	0.011	<1.0	0.028	.
L 775111B	<0.15	60.	0.025	0.015	<1.0	0.019	.
L 776111A	<0.15	.	<0.005	0.021	.	0.076	.
L 776111B	<0.15	.	0.019	0.019	.	0.055	.
L 711108A	<0.15	1000.	0.24	<0.005	<1.0	0.091	.
L 711108B	<0.15	1000.	0.080	<0.005	<1.0	0.16	.
L 711109A	<0.15	1300.	0.10	<0.005	<1.0	0.072	0.73
L 711109B	<0.15	1300.	0.22	<0.005	<1.0	0.057	0.73
L 711110A	<0.15	1100.	0.20	<0.005	<1.0	0.20	.
L 711110B	<0.15	1100.	0.20	<0.005	<1.0	0.085	0.60
L 711111A	<0.15	960.	0.22	<0.005	<1.0	0.091	0.47
L 711111B	.	960.	.	.	<1.0	.	0.19

	HG	K	LI	MG	MN	MO	NA
L 170100*A	.	<40.	.	2.6	<0.001	.	<5.0
L 170100*B	.	<40.	.	2.9	<0.001	.	11.
L 170100A	<0.0005	<40.	0.060	1.6	<0.001	.	28.
L 170100B	<0.0005	<40.	0.060	0.75	<0.001	.	27.
L 170100C	.	<40.	0.060	0.61	<0.001	.	22.
L 170100D	.	<40.	0.060	6.3	0.0052	.	34.
L 170100E	.	<40.	0.060	0.89	<0.001	.	19.
L 170100F	.	<40.	0.030	0.57	<0.001	.	5.8
L 170100W	.	735.	.	0.46	0.014	2.5	15.
L 170100X	.	640.	.	0.23	0.011	2.3	13.
L 170100Y	.	870.	.	0.16	0.014	2.9	19.
L 170100Z	.	602.	.	0.21	0.0080	2.2	12.
L 170200A	.	773.	.	0.22	0.019	1.9	26.
L 170200B	.	951.	.	0.097	0.023	2.5	28.
L 170200C	.	824.	.	0.30	0.019	2.1	26.
L 170200D	.	816.	.	0.17	0.019	2.1	26.
L 170200E	.	805.	.	0.36	0.021	2.0	27.
L 170200F	.	686.	.	0.14	0.019	1.7	23.
L 170200S	.	870.	.	0.24	0.021	2.2	28.
L 170200H	.	1007.	.	0.40	0.026	2.6	30.
L 170200I	.	924.	.	0.18	0.021	2.4	29.
L 170200J	.	832.	.	0.36	0.021	2.1	27.
L 170200K	.	833.	.	0.20	0.020	2.1	27.
L 170200L	.	715.	.	0.25	0.019	1.8	25.
L 170300*A	.	41.	0.32	<0.03	0.0080	0.37	12.
L 170300*AA	.	43.	0.46	1.7	0.025	0.46	14.
L 170300*B	.	41.	0.31	<0.03	0.0070	0.36	12.
L 170300*BB	.	43.	0.40	0.60	0.021	0.39	14.
L 170300*C	.	40.	0.30	<0.03	0.015	0.44	12.
L 170300*CC	.	44.	0.40	0.71	0.015	0.39	14.
L 170300*D	.	47.	0.36	<0.03	0.0070	0.43	13.
L 170300*E	.	42.	0.31	<0.03	0.011	0.40	12.
L 170300*F	.	42.	0.31	<0.03	0.018	0.40	12.
L 170300*H	.	40.	0.30	0.046	0.024	0.43	13.
L 170300*I	.	42.	0.42	0.041	0.030	0.48	15.
L 170300*J	.	46.	0.40	0.051	0.020	0.43	14.
L 170300*K	.	41.	0.40	0.048	0.029	0.45	13.
L 170300*L	.	44.	0.41	0.044	0.029	0.46	13.
L 170300*M	.	48.	0.43	0.044	0.027	0.49	15.
L 170300*N	.	46.	0.40	0.043	0.023	0.44	14.
L 170300*O	.	50.	0.41	0.050	0.018	0.43	15.
L 170300*P	.	55.	.	1.6	0.025	0.45	17.
L 170300*Q	.	48.	.	2.2	0.035	0.42	14.
L 170300*R	.	50.	.	1.9	0.031	0.42	14.
L 170300*S	.	45.	.	2.6	0.043	0.43	13.
L 170300*T	.	55.	.	1.2	0.019	0.40	16.
L 170300*U	.	53.	.	1.8	0.029	0.42	15.

	HG	K	LI	MG	MN	MO	NA
L 170300•V	•	51.	•	2.3	0.037	0.43	15.
L 170300•W	•	52.	•	2.7	0.043	0.48	15.
L 170300•X	•	43.	0.44	1.4	0.023	0.43	14.
L 170300•Y	•	43.	0.44	1.2	0.019	0.43	14.
L 170300•Z	•	42.	0.44	1.4	0.022	0.44	14.
L 170400•A	•	16.	0.40	2.7	<0.006	<0.01	6.5
L 170400•B	•	16.	0.41	3.2	<0.006	<0.01	6.5
L 170400A	•	18.	0.48	3.1	0.0060	<0.01	5.8
L 170400B	•	18.	0.50	2.9	0.016	<0.01	4.9
L 170400C	•	20.	0.59	1.7	0.023	0.061	7.0
L 170400D	•	19.	0.61	2.3	0.017	0.044	8.2
L 120100A	•	<40.	•	0.17	<0.001	•	<5.0
L 120100B	•	<40.	•	3.0	<0.001	•	7.4
L 120100C	•	<40.	•	0.12	<0.001	•	<5.0
L 120100D	•	•	•	•	•	•	•
L 120100E	•	<40.	•	0.13	<0.001	•	<5.0
L 120100F	•	<40.	•	1.0	<0.001	•	<5.0
L 110100A	•	<40.	•	0.099	<0.001	•	<5.0
L 110100B	•	<40.	•	0.12	<0.001	•	<5.0
L 110100C	•	<40.	•	0.37	<0.001	•	<5.0
L 110100D	•	<40.	•	4.0	<0.001	•	<5.0
L 110100E	•	<40.	•	4.7	<0.001	•	<5.0
L 110100F	•	<40.	•	6.1	<0.001	•	<5.0
L 470108A	<0.001	<40.	<0.01	0.080	0.76	<0.04	<5.0
L 470108B	<0.001	134.	<0.01	0.0025	0.0039	0.93	<5.0
L 470108C	•	22.	0.032	•	0.021	0.93	16.
L 470108D	•	18.	0.080	•	0.046	0.89	12.
L 571108A	<0.001	521.	<0.01	0.0057	0.018	1.8	<5.0
L 571108B	<0.001	290.	<0.01	0.0022	0.0067	1.2	<5.0
L 572108A	<0.001	537.	<0.01	<0.001	0.011	1.8	<5.0
L 572108B	<0.001	428.	<0.01	0.0016	0.0081	1.5	<5.0
L 573108A	<0.001	418.	0.020	0.0022	0.0092	1.5	<5.0
L 573108B	<0.001	601.	0.020	0.0021	0.014	2.0	<5.0
L 574108A	<0.001	456.	0.030	0.0020	0.011	1.6	<5.0
L 574108B	<0.001	372.	0.030	0.0015	0.0086	1.3	<5.0
L 575108A	•	557.	•	0.027	0.013	1.8	11.
L 575108B	•	715.	•	0.024	0.017	2.2	15.
L 576108A	•	878.	•	0.036	0.024	2.6	19.
L 576108B	•	761.	•	0.023	0.018	2.3	17.
L 671108A	•	23.	0.024	•	0.032	0.88	17.

	HG	K	LI	MG	MN	MO	NA
L 671108B	.	19.	0.076	.	0.036	0.88	13.
L 673108A	.	28.	0.014	.	0.75	0.53	18.
L 672108B	.	27.	0.068	.	0.84	0.60	16.
L 673108A	.	30.	0.023	.	0.99	0.27	17.
L 673108B	.	30.	0.064	.	1.1	0.35	16.
L 674108A	.	34.	0.051	.	1.3	0.22	17.
L 674108B	.	39.	0.0080	.	1.3	0.14	19.
L 675108A	.	42.	0.0050	.	1.4	0.071	20.
L 675108B	.	38.	0.044	.	1.5	0.13	18.
L 470109A	<0.001	<40.	<0.01	0.054	<0.001	.	23.
L 4701098	<0.001	<40.	<0.01	0.050	<0.001	.	25.
L 470109C	.	215.	.	0.0019	0.0031	1.1	<5.0
L 470109D	.	294.	.	0.0020	0.0054	1.3	<5.0
L 571109A	.	388.	.	0.0016	0.0077	1.5	<5.0
L 5711098	.	362.	.	0.0017	0.0061	1.4	<5.0
L 571109C	<0.001	.	<0.01	.	.	.	.
L 571109D	<0.001	.	<0.01	.	.	.	.
L 572109A	.	664.	.	<0.001	0.015	2.2	<5.0
L 5721098	.	1067.	.	0.0011	0.027	3.3	7.3
L 572109C	<0.001	.	<0.01	.	.	.	.
L 572109D	<0.001	.	<0.01	.	.	.	.
L 573109A	.	592.	.	0.0010	0.013	1.9	<5.0
L 573109B	.	1182.	.	0.0011	0.030	3.6	8.0
L 573109C	<0.001	.	0.030	.	.	.	.
L 573109D	<0.001	.	0.030	.	.	.	.
L 574109A	.	373.	.	<0.001	0.0068	1.3	<5.0
L 574109B	.	512.	.	0.0014	0.011	1.7	<5.0
L 574109C	<0.001	.	0.030	.	.	.	.
L 574109D	<0.001	.	0.030	.	.	.	.
L 575109A	.	641.	.	0.022	0.014	2.0	13.
L 5751098	.	573.	.	0.018	0.012	1.8	12.
L 576109A	.	780.	.	0.034	0.018	2.4	17.
L 576109B	.	796.	.	0.032	0.019	2.4	18.
L 671109A	<0.001	892.	0.030	0.091	0.023	3.0	6.4
L 671109B	<0.001	886.	<0.01	0.056	0.023	3.0	6.4
L 672109A	.	2050.	.	1.4	0.35	5.9	15.
L 672109B	.	2111.	.	1.2	0.30	6.1	15.
L 672109D	<0.001	.	0.050	.	.	.	.
L 672109E	<0.001	.	0.080	.	.	.	.
L 673109A	<0.001	508.	0.050	7.1	1.5	1.1	<5.0
L 673109B	<0.001	794.	0.070	5.7	1.2	2.8	5.7
L 674109A	<0.001	2622.	0.070	2.7	0.85	7.6	18.
L 674109B	<0.001	476.	0.070	9.6	2.0	1.0	<5.0
L 675109A	.	528.	.	110.	2.6	1.2	19.

	HG	K	LI	MG	MN	MO	NA
L 675I09B	•	485.	•	110.	2.6	1.0	18.
L 470110A	<0.001	367.	<0.01	0.0014	0.0081	1.4	<5.0
L 470110B	<0.001	461.	<0.01	0.0017	0.010	1.7	<5.0
L 470110C	•	37.	0.022	•	0.019	0.84	19.
L 470110D	•	29.	0.026	•	0.019	0.73	16.
L 571110A	<0.001	426.	<0.01	0.0073	0.016	1.5	<5.0
L 571110B	<0.001	435.	<0.01	0.0022	0.0089	1.6	<5.0
L 572110A	<0.001	498.	0.030	0.0013	0.010	1.7	<5.0
L 572110B	<0.001	838.	0.030	<0.001	0.021	2.6	5.5
L 573110A	<0.001	1210.	0.050	0.0014	0.032	3.6	8.0
L 573110B	<0.001	651.	0.050	0.0024	0.016	2.1	<5.0
L 574110A	<0.001	525.	0.060	0.0010	0.011	1.7	<5.0
L 574110B	<0.001	931.	0.040	<0.001	0.023	2.8	6.0
L 575110A	•	751.	•	0.025	0.017	2.3	17.
L 575110B	•	721.	•	0.034	0.018	2.2	16.
L 576110A	•	1063.	•	0.026	0.026	3.2	25.
L 576110B	•	999.	•	0.027	0.024	3.0	23.
L 671110A	•	42.	0.0020	•	0.013	0.85	21.
L 671110B	•	32.	0.012	•	0.0080	0.77	17.
L 672110A	•	52.	0.0050	•	0.21	0.64	23.
L 672110B	•	36.	0.026	•	0.17	0.63	17.
L 673110A	•	53.	0.040	•	0.83	0.37	19.
L 673110B	•	52.	0.037	•	0.89	0.38	19.
L 674110A	•	64.	0.044	•	1.2	0.23	21.
L 674110B	•	54.	0.049	•	1.2	0.23	19.
L 675110A	•	66.	0.042	•	1.4	0.14	20.
L 675110B	•	77.	0.055	•	1.5	0.15	24.
L 470111A	•	<40.	•	0.16	<0.001	•	50.
L 470111B	•	<40.	•	0.31	<0.001	•	31.
L 671111A	•	<40.	•	0.093	<0.001	•	67.
L 671111B	•	<40.	•	0.091	<0.001	•	47.
L 470112A	<0.001	422.	<0.01	0.0020	0.011	1.9	<5.0
L 470112B	<0.001	434.	<0.01	0.0050	0.012	1.9	<5.0
L 470112C	•	13.	<0.0004	•	0.0060	0.92	19.
L 470112D	•	12.	0.0050	•	0.017	0.90	19.
L 571112A	<0.001	246.	<0.01	0.0031	0.0045	1.2	<5.0

	HG	K	LI	MG	MN	MO	NA
L 571112B	<0.001	297.	<0.01	0.0085	0.0068	1.3	<5.0
L 572112A	<0.001	371.	<0.01	0.0026	0.0081	1.4	<5.0
L 572112B	<0.001	319.	0.020	0.0046	0.0060	1.3	<5.0
L 573112A	<0.001	524.	0.030	0.0063	0.013	1.8	<5.0
L 573112B	<0.001	921.	0.030	0.0056	0.025	2.9	6.0
L 574112A	<0.001	337.	0.030	0.0047	0.0069	1.2	<5.0
L 574112B	<0.001	456.	<0.01	0.0061	0.011	1.6	<5.0
L 575112A	•	650.	•	0.046	0.016	2.1	14.
L 575112B	•	726.	•	0.036	0.017	2.3	16.
L 576112A	•	946.	•	0.11	0.024	2.8	22.
L 576112B	•	948.	•	0.052	0.023	2.9	21.
L 671112A	•	5.8	<0.0004	•	0.0030	0.97	22.
L 671112B	•	5.3	0.0030	•	0.0020	0.98	20.
L 672112A	•	7.1	0.0060	•	0.020	0.50	22.
L 672112B	•	7.4	<0.0004	•	0.021	0.47	24.
L 673112A	•	8.4	<0.0004	•	0.048	0.18	26.
L 673112B	•	8.6	0.0060	•	0.053	0.20	24.
L 674112A	•	9.9	<0.0004	•	0.032	0.066	27.
L 674112B	•	9.8	0.0060	•	0.039	0.077	25.
L 675112A	•	10.	<0.0004	•	0.032	0.035	29.
L 675112B	•	10.	0.0080	•	0.028	0.048	26.
L 470113A	<0.001	425.	<0.01	0.0017	0.014	1.7	<5.0
L 470113B	<0.001	562.	0.030	0.0033	0.022	2.1	<5.0
L 470113C	•	19.	<0.0004	<0.03	0.024	0.84	14.
L 470113D	•	19.	<0.0004	<0.03	0.018	0.82	13.
L 571113A	<0.001	379.	<0.01	0.0030	0.015	1.4	<5.0
L 571113B	<0.001	722.	0.060	0.0014	0.020	2.3	<5.0
L 572113A	<0.001	2368.	0.060	0.0019	0.065	7.0	16.
L 572113B	<0.001	2043.	0.050	0.0032	0.062	6.0	14.
L 573113A	<0.001	1241.	0.040	0.0021	0.036	3.7	7.4
L 573113B	<0.001	1737.	0.050	0.0013	0.048	5.1	11.
L 574113A	<0.001	501.	0.050	0.0029	0.020	1.6	<5.0
L 574113B	<0.001	588.	0.070	0.0042	0.035	1.9	<5.0
L 575113A	•	702.	•	0.061	0.030	2.2	15.
L 575113B	•	689.	•	0.11	0.023	2.1	15.
L 576113A	•	923.	•	0.033	0.032	2.8	22.
L 576113B	•	841.	•	0.055	0.036	2.6	20.
L 671113A	•	11.	<0.0004	<0.03	0.028	0.85	12.
L 671113B	•	11.	<0.0004	<0.03	0.072	0.83	13.
L 672113A	•	11.	<0.0004	<0.03	0.43	0.025	13.
L 672113B	•	11.	<0.0004	<0.03	0.52	0.013	13.
L 673113A	•	12.	0.0010	<0.03	1.1	<0.002	14.

	HG	K	LI	MG	MN	MO	NA
L 673113B	.	12.	<0.0004	<0.03	1.1	<0.002	14.
L 674113A	.	11.	0.0040	<0.03	1.5	<0.002	14.
L 674113B	.	12.	<0.0004	<0.03	1.5	<0.002	14.
L 675113A	.	11.	0.0040	.	1.8	0.0030	15.
L 675113B	.	12.	<0.0004	<0.03	1.8	<0.002	14.
L 470114A	<0.001	694.	0.040	0.0044	0.016	2.4	5.8
L 470114B	<0.001	749.	<0.01	0.016	0.020	2.6	6.2
L 470114C	<0.001	895.	<0.01	0.0055	0.022	2.9	7.0
L 470114D	<0.001	1054.	0.060	0.0085	0.028	3.3	7.5
L 571114A	<0.001	822.	0.060	0.011	0.021	2.6	5.1
L 571114B	<0.001	1916.	0.090	0.0028	0.052	5.7	13.
L 572114A	<0.001	756.	0.040	0.0082	0.018	2.3	<5.0
L 572114B	<0.001	785.	0.040	0.0046	0.018	2.5	<5.0
L 573114A	<0.001	2247.	0.080	0.0033	0.061	6.6	15.
L 573114B	<0.001	1908.	0.090	0.0045	0.052	5.6	12.
L 574114A	<0.001	991.	0.060	0.0041	0.025	2.9	5.5
L 574114B	<0.001	630.	0.070	0.012	0.014	2.0	<5.0
L 575114A	.	855.	.	0.069	0.020	2.6	20.
L 575114B	.	723.	.	0.069	0.016	2.3	18.
L 576114A	.	955.	.	0.13	0.023	2.9	22.
L 576114B	.	984.	.	0.078	0.022	2.9	22.
L 671114A	<0.001	305.	0.060	0.011	0.0070	1.5	<5.0
L 671114B	<0.001	1989.	0.10	0.017	0.058	6.1	15.
L 672114A	.	251.	.	4.0	0.0071	1.5	20.
L 672114B	.	245.	.	3.9	0.0053	1.6	22.
L 673114A	.	311.	.	18.	0.012	1.7	23.
L 673114B	.	296.	.	19.	0.011	1.7	25.
L 674114A	.	252.	.	26.	0.015	1.5	24.
L 674114B	.	299.	.	27.	0.012	1.7	27.
L 675114A	.	.	.	.	.	.	.
L 675114B	.	.	.	.	.	.	.
L 470308A	.	42.	0.059	0.021	0.0080	0.49	16.
L 470308B	.	42.	0.060	0.022	0.0080	0.49	16.
L 470308C	.	.	.	.	.	.	.
L 470308D	.	.	.	.	.	.	.
L 571308A	.	53.	0.083	90.	0.0020	0.40	15.
L 571308B	.	48.	0.077	<0.03	0.0080	0.40	13.
L 572308A	.	50.	0.21	0.064	0.018	0.43	15.
L 572308B	.	47.	0.20	0.034	0.014	0.42	14.
L 573308A	.	51.	0.29	0.044	0.020	0.46	15.

	HG	K	LI	MG	MN	MO	NA
L 573308B	.	49.	0.27	0.046	0.020	0.45	15.
L 574308A	.	51.	0.33	0.030	0.019	0.47	16.
L 574308B	.	52.	0.33	0.043	0.022	0.47	15.
L 575308A	.	55.	0.37	<0.008	0.018	0.48	17.
L 575308B	.	52.	0.36	<0.008	0.018	0.47	16.
L 576308A	.	55.	.	0.93	0.015	0.38	16.
L 576308B	.	57.	.	1.2	0.019	0.43	17.
L 577308A	.	54.	.	1.2	0.019	0.42	16.
L 577308B	.	54.	.	0.99	0.016	0.38	15.
L 578308A	.	53.	.	1.4	0.023	0.42	16.
L 578308B	.	53.	.	1.3	0.021	0.40	15.
L 579308A	.	54.	.	2.2	0.035	0.44	15.
L 579308B	.	55.	.	1.4	0.022	0.40	15.
L 671308A	.	33.	0.037	0.75	0.0090	0.50	16.
L 671308B	.	33.	0.047	1.3	0.015	0.49	16.
L 672308A	.	35.	0.034	16.	0.61	0.30	16.
L 672308B	.	35.	0.035	16.	0.64	0.29	16.
L 673308A	.	43.	.	30.	0.99	0.16	17.
L 673308B	.	42.	.	29.	0.96	0.16	17.
L 674308A	.	47.	.	38.	1.1	0.12	17.
L 674308B	.	47.	.	40.	1.3	0.083	18.
L 675308A	.	48.	.	44.	1.3	0.089	17.
L 675308B	.	48.	.	44.	1.3	0.088	17.
L 470309A	.	40.	0.031	420.	0.0030	0.48	16.
L 470309B	.	40.	0.029	15.	0.0020	0.47	16.
L 470309C	.	45.	.	1.7	0.025	0.51	17.
L 470309D	.	46.	.	0.76	0.011	0.47	18.
L 571309A	.	52.	0.098	14.	0.0020	0.41	15.
L 571309B	.	50.	0.096	14.	0.0030	0.41	14.
L 572309A	.	49.	0.23	0.024	0.017	0.45	15.
L 572309B	.	47.	0.24	0.027	0.020	0.46	14.
L 573309A	.	48.	0.31	0.026	0.022	0.49	15.
L 573309B	.	47.	0.31	0.033	0.024	0.49	14.
L 574309A	.	51.	0.34	0.024	0.020	0.48	15.
L 574309B	.	50.	0.33	0.027	0.019	0.47	15.
L 575309A	.	52.	0.35	<0.008	0.017	0.47	16.
L 575309B	.	52.	0.35	<0.008	0.016	0.46	16.
L 576309A	.	55.	.	1.2	0.019	0.40	16.
L 576309B	.	54.	.	1.2	0.018	0.40	16.
L 577309A	.	54.	.	1.8	0.029	0.44	15.
L 577309B	.	56.	.	0.94	0.014	0.41	17.
L 578309A	.	52.	.	2.1	0.033	0.44	15.
L 578309B	.	54.	.	1.7	0.026	0.42	15.
L 579309A	.	48.	.	2.0	0.033	0.41	14.

	HG	K	LI	MG	MN	MO	NA
L 579309B	.	51.	.	2.0	0.031	0.43	14.
L 671309A	.	37.	.	2.9	0.016	0.52	20.
L 671309B	.	38.	.	3.1	0.014	0.52	20.
L 672309A	.	43.	.	31.	0.51	0.076	22.
L 672309B	.	42.	.	31.	0.50	0.087	21.
L 673309A	.	47.	.	51.	0.95	0.076	23.
L 673309B	.	50.	.	50.	1.0	0.066	24.
L 674309A	.	51.	0.32	86.	1.7	0.039	28.
L 674309B	.	51.	0.32	85.	1.7	0.052	28.
L 675309A	.	55.	0.38	100.	2.1	0.027	30.
L 675309B	.	54.	0.38	100.	2.0	0.027	30.
L 670310A	.	56.	0.069	<0.03	0.0030	0.41	15.
L 670310B	.	54.	0.075	<0.03	0.0040	0.41	15.
L 670310C	.	53.	.	0.46	0.0070	0.39	17.
L 670310D	.	54.	.	0.69	0.010	0.39	17.
L 671310A	.	52.	0.18	13.	0.0040	0.39	14.
L 671310B	.	53.	0.17	14.	0.0030	0.39	15.
L 672310A	.	48.	0.29	0.027	0.015	0.43	15.
L 672310B	.	50.	0.30	0.030	0.013	0.42	15.
L 673310A	.	49.	0.37	0.051	0.026	0.48	15.
L 673310B	.	47.	0.35	0.044	0.023	0.46	14.
L 674310A	.	49.	0.36	0.032	0.018	0.44	15.
L 674310B	.	48.	0.36	0.023	0.020	0.44	15.
L 675310A	.	52.	0.37	<0.008	0.013	0.43	16.
L 675310B	.	51.	0.39	<0.008	0.017	0.45	16.
L 676310A	.	54.	.	1.5	0.026	0.42	16.
L 676310B	.	50.	.	2.1	0.033	0.41	14.
L 677310A	.	53.	.	1.7	0.028	0.43	15.
L 677310B	.	49.	.	1.5	0.025	0.38	14.
L 678310A	.	54.	.	2.2	0.035	0.45	15.
L 678310B	.	54.	.	1.1	0.019	0.41	16.
L 679310A	.	51.	.	1.6	0.026	0.41	14.
L 679310B	.	54.	.	2.0	0.031	0.44	15.
L 671310A	.	50.	0.022	0.29	0.0050	0.45	19.
L 671310B	.	49.	0.020	0.27	0.0030	0.43	18.
L 672310A	.	53.	0.047	21.	0.26	0.38	19.
L 672310B	.	53.	0.037	21.	0.23	0.38	19.
L 673310A	.	59.	0.055	47.	1.2	0.12	20.
L 673310B	.	57.	0.049	46.	1.2	0.12	19.
L 674310A	.	66.	0.053	65.	2.0	0.041	21.
L 674310B	.	64.	0.065	64.	1.9	0.049	21.
L 675310A	.	70.	0.061	85.	2.6	0.035	22.

	HG	K	LI	MG	MN	MO	NA
L 675310B	•	69.	0.085	84.	2.5	0.039	21.
L 470312A	•	23.	0.044	<0.03	0.0020	0.58	17.
L 470312B	•	22.	0.042	<0.03	0.0030	0.58	16.
L 470312C	•	25.	0.059	0.19	0.0040	0.60	20.
L 470312D	•	25.	0.055	0.17	0.0030	0.61	20.
L 571312A	•	43.	0.13	<0.03	0.0030	0.42	15.
L 571312B	•	42.	0.12	660.	<0.001	0.41	15.
L 572312A	•	48.	0.24	0.026	0.013	0.44	15.
L 572312B	•	46.	0.24	0.024	0.015	0.44	14.
L 573312A	•	47.	0.30	0.053	0.019	0.46	14.
L 573312B	•	49.	0.30	0.033	0.018	0.47	15.
L 574312A	•	51.	0.33	0.031	0.017	0.47	15.
L 574312B	•	50.	0.34	0.032	0.020	0.47	15.
L 575312A	•	54.	0.37	<0.008	0.017	0.49	16.
L 575312B	•	53.	0.36	<0.008	0.017	0.48	16.
L 576312A	•	53.	•	1.6	0.024	0.41	15.
L 576312B	•	50.	•	1.5	0.025	0.39	14.
L 577312A	•	53.	•	1.6	0.025	0.41	15.
L 577312B	•	52.	•	1.8	0.030	0.42	14.
L 578312A	•	53.	•	1.8	0.028	0.42	15.
L 578312B	•	53.	•	1.2	0.018	0.40	16.
L 579312A	•	52.	•	1.6	0.026	0.42	15.
L 579312B	•	47.	•	2.2	0.034	0.42	13.
L 671312A	•	8.9	0.028	6.6	0.013	0.68	21.
L 671312B	•	9.1	0.026	6.6	0.0040	0.69	22.
L 672312A	•	7.8	0.017	30.	0.017	0.32	23.
L 672312B	•	7.9	0.017	30.	0.014	0.32	24.
L 673312A	•	8.5	0.0090	45.	0.027	0.32	25.
L 673312B	•	8.7	0.013	45.	0.028	0.12	25.
L 674312A	•	9.9	0.010	55.	0.031	0.052	27.
L 674312B	•	9.6	0.0090	54.	0.032	0.051	27.
L 675312A	•	10.	0.0090	57.	0.034	0.032	29.
L 675312B	•	10.	0.0030	57.	0.036	0.034	29.
L 470313A	•	34.	0.010	<0.03	0.0050	0.38	13.
L 470313B	•	35.	0.0090	<0.03	0.011	0.38	12.
L 470313C	•	37.	0.016	0.18	0.0050	0.40	14.
L 470313D	•	38.	0.022	0.26	0.010	0.40	14.
L 571313A	•	49.	0.078	14.	0.010	0.38	14.
L 571313B	•	45.	0.074	14.	0.0080	0.39	12.
L 572313A	•	47.	0.21	0.036	0.020	0.42	15.

	HG	K	LI	MG	MN	MO	NA
L 572313B	.	47.	0.21	0.034	0.019	0.43	15.
L 573313A	.	46.	0.35	0.034	0.033	0.54	14.
L 573313B	.	45.	0.30	0.032	0.026	0.44	14.
L 574313A	.	49.	0.34	0.021	0.021	0.47	15.
L 574313B	.	48.	0.34	0.020	0.022	0.46	15.
L 575313A	.	52.	0.35	0.036	0.022	0.47	16.
L 575313B	.	51.	0.35	0.033	0.019	0.45	16.
L 576313A	.	47.	.	2.2	0.038	0.41	13.
L 576313B	.	54.	.	1.6	0.031	0.43	16.
L 577313A	.	53.	.	1.7	0.030	0.43	15.
L 577313B	.	52.	.	2.1	0.039	0.43	15.
L 578313A	.	53.	.	1.9	0.031	0.43	15.
L 578313B	.	53.	.	1.6	0.031	0.42	15.
L 579313A	.	46.	.	2.0	0.036	0.41	13.
L 579313B	.	51.	.	1.4	0.024	0.40	15.
L 671313A	.	25.	0.0020	0.10	0.0050	0.41	13.
L 671313B	.	24.	0.0020	0.094	0.0050	0.41	13.
L 672313A	.	19.	<0.0004	5.8	0.021	0.11	13.
L 672313B	.	20.	0.0020	6.6	0.078	0.051	13.
L 673313A	.	17.	0.0040	12.	0.71	0.0080	14.
L 673313B	.	17.	0.0080	12.	0.69	<0.002	14.
L 674313A	.	16.	<0.0004	17.	1.2	<0.002	14.
L 674313B	.	16.	0.0070	17.	1.3	<0.002	15.
L 675313A	.	15.	0.0020	21.	1.8	<0.002	15.
L 675313B	.	15.	<0.0004	21.	1.9	<0.002	15.
L 470314A	.	80.	0.18	15.	<0.001	0.50	29.
L 470314B	.	81.	0.18	680.	<0.001	0.50	29.
L 470314C	.	79.	0.22	0.23	0.0030	0.53	31.
L 470314D	.	79.	0.23	0.28	0.0040	0.55	31.
L 571314A	.	53.	0.29	<0.03	0.0060	0.44	15.
L 571314B	.	52.	0.29	15.	0.0050	0.42	14.
L 572314A	.	45.	0.39	0.061	0.024	0.48	14.
L 572314B	.	44.	0.36	0.075	0.018	0.44	14.
L 573314A	.	45.	0.40	0.075	0.025	0.47	14.
L 573314B	.	47.	0.41	0.11	0.026	0.48	15.
L 574314A	.	47.	0.42	0.026	0.026	0.48	15.
L 574314B	.	48.	0.40	<0.008	0.021	0.47	15.
L 575314A	.	49.	0.40	0.073	0.018	0.47	15.
L 575314B	.	49.	0.41	0.058	0.020	0.47	15.
L 576314A	.	54.	.	1.8	0.028	0.44	16.
L 576314B	.	53.	.	1.8	0.029	0.41	15.
L 577314A	.	53.	.	2.1	0.034	0.44	15.
L 577314B	.	52.	.	2.5	0.039	0.45	15.
L 578314A	.	53.	.	1.4	0.021	0.41	16.

	HG	K	LI	MG	MN	MO	NA
L 578314B	.	53.	.	2.4	0.037	0.46	15.
L 579314A	.	47.	.	2.3	0.037	0.43	14.
L 579314B	.	52.	.	1.5	0.024	0.41	15.
L 671314A	.	96.	0.076	0.082	0.0010	0.69	45.
L 671314B	.	100.	0.077	0.10	0.0010	0.70	46.
L 672314A	.	109.	0.044	1.3	0.0030	0.84	60.
L 672314B	.	107.	0.046	1.4	0.0020	0.84	59.
L 673314A	.	118.	0.064	17.	0.0030	0.95	73.
L 673314B	.	117.	0.065	17.	0.0030	0.95	73.
L 674314A	.	125.	0.084	24.	0.0020	1.1	87.
L 674314B	.	123.	0.084	24.	0.0020	1.1	86.
L 675314A	.	130.	0.095	27.	<0.001	1.2	610.
L 675314B	.	129.	0.095	27.	<0.001	1.2	98.
L 470408A	.	15.	<0.002	0.57	<0.006	<0.01	8.5
L 470408B	.	16.	0.0030	0.47	<0.006	<0.01	8.5
L 470409A	.	16.	0.18	1.6	<0.006	<0.01	11.
L 470409B	.	15.	0.12	1.1	<0.006	<0.01	9.5
L 470410A	.	21.	0.037	3.1	<0.006	<0.01	8.5
L 470410B	.	20.	.	3.1	<0.006	<0.01	8.7
L 470412A	.	7.0	0.052	2.1	<0.006	0.16	9.9
L 470412B	.	6.8	0.049	2.5	<0.007	0.15	9.7
L 470413A	.	11.	<0.002	0.21	<0.006	<0.01	6.6
L 470413B	.	11.	<0.002	0.52	<0.006	<0.01	6.6
L 470414A	.	33.	0.17	0.85	<0.006	0.081	22.
L 470414B	.	33.	0.23	1.1	<0.006	0.060	22.
L 420108A	.	392.	.	0.030	0.0070	1.5	9.9
L 420108B	.	429.	.	0.028	0.0080	1.6	10.
L 420109A	.	744.	.	0.017	0.012	2.5	18.
L 420109B	.	591.	.	0.018	0.0080	2.0	14.
L 420110A	.	694.	.	0.021	0.013	2.2	16.
L 420110B	.	922.	.	0.025	0.016	2.8	22.
L 420112A	.	417.	.	0.049	0.0070	1.7	12.
L 420112B	.	544.	.	0.12	0.011	2.0	14.
L 420113A	.	584.	.	0.023	0.018	1.9	14.
L 420113B	.	597.	.	0.013	0.011	2.0	14.
L 420114A	.	568.	.	0.11	0.0080	1.9	16.
L 420114B	.	709.	.	0.044	0.011	2.3	21.
L 420308A	.	44.	0.049	0.18	0.0030	0.43	17.
L 420308B	.	43.	0.059	0.26	0.0040	0.43	16.
L 420309A	.	44.	0.064	0.29	0.0050	0.49	19.
L 420309B	.	44.	0.068	0.33	0.0050	0.50	19.
L 420310A	.	49.	0.12	0.39	0.035	0.42	16.

	HG	K	LI	MG	MN	MO	NA
L 420310B	•	48.	0.13	0.39	0.0060	0.42	16.
L 420312A	•	26.	0.088	0.29	0.0050	0.58	18.
L 420312B	•	26.	0.077	0.19	0.010	0.58	18.
L 420313A	•	38.	0.019	0.16	0.0031	0.39	14.
L 420313B	•	40.	0.023	0.17	0.012	0.40	14.
L 420314A	•	77.	0.21	0.25	0.0070	0.53	31.
L 420314B	•	78.	0.22	0.16	0.0030	0.53	30.
L 410108A	•	<40.	•	0.070	<0.001	•	27.
L 410108B	•	<40.	•	0.12	0.0064	•	13.
L 410109A	•	<40.	•	0.057	<0.001	•	<5.0
L 410109B	•	<40.	•	0.072	<0.001	•	8.2
L 410110A	•	<40.	•	0.050	<0.001	•	21.
L 410110B	•	<40.	•	0.088	<0.001	•	<5.0
L 410111A	•	<40.	•	0.072	<0.001	•	32.
L 410111B	•	<40.	•	0.095	<0.001	•	25.
L 410112A	•	791.	•	0.079	0.015	2.7	19.
L 410112B	•	0.10	•	0.12	0.020	3.2	24.
L 410113A	•	810.	•	0.027	0.022	2.5	19.
L 410113B	•	893.	•	0.018	0.020	2.7	21.
L 410114A	•	951.	•	0.048	0.016	2.9	26.
L 410114B	•	0.10	•	0.42	0.023	3.0	27.
L 410308A	•	43.	0.069	0.23	0.0040	0.42	16.
L 410308B	•	44.	0.074	0.32	0.0070	0.42	16.
L 410309A	•	44.	0.068	0.25	0.0040	0.47	18.
L 410309B	•	44.	0.068	0.25	0.0050	0.46	18.
L 410310A	•	47.	0.14	0.36	0.0060	0.41	16.
L 410310B	•	46.	0.16	0.59	0.0090	0.42	15.
L 410312A	•	28.	0.094	0.23	0.0030	0.57	18.
L 410312B	•	28.	0.098	0.26	0.0040	0.58	18.
L 410313A	•	37.	0.041	0.28	0.0080	0.40	14.
L 410313B	•	36.	0.035	0.21	0.0050	0.39	13.
L 410314A	•	74.	0.21	0.24	0.0040	0.51	29.
L 410314B	•	73.	0.22	0.26	0.0040	0.51	29.
L 771108A	•	<40.	•	0.24	0.026	•	23.
L 771108B	•	<40.	•	0.024	0.0076	•	<5.0
L 772108A	•	<40.	•	0.073	<0.001	•	22.
L 772108B	•	<40.	•	0.059	<0.001	•	20.
L 773108A	•	<40.	•	0.023	0.0050	<0.04	<5.0
L 773108B	•	<40.	•	0.023	<0.001	<0.04	<5.0
L 774108A	•	<40.	•	0.035	<0.001	<0.04	<5.0
L 774108B	•	<40.	•	0.029	<0.001	<0.04	<5.0
L 775108A	•	<40.	•	0.43	<0.001	<0.04	7.9
L 775108B	•	<40.	•	<0.001	0.014	<0.04	<5.0
L 776108A	•	<40.	•	<0.001	0.013	<0.04	<5.0

	HG	K	LI	MG	MN	MO	NA
L 776I08B	.	<40.	.	0.034	0.030	<0.04	<5.0
L 771109A	.	<40.	.	0.012	<0.001	.	22.
L 771109B	.	.	.	.	.	.	.
L 772109A	.	<40.	.	0.015	<0.001	.	23.
L 772109B	.	<40.	.	0.033	0.0073	.	7.3
L 773I09A	.	<40.	.	0.011	0.0068	<0.04	<5.0
L 773109B	.	<40.	.	0.011	<0.001	<0.04	<5.0
L 774109A	.	<40.	.	0.013	<0.001	<0.04	<5.0
L 774109B	.	<40.	.	0.014	<0.001	<0.04	<5.0
L 775109A	.	<40.	.	0.028	<0.001	<0.04	6.5
L 775I09B	.	<40.	.	<0.001	0.0035	<0.04	<5.0
L 776109A	.	<40.	.	<0.001	0.0017	<0.04	<5.0
L 776I09B	.	<40.	.	0.042	0.011	<0.04	8.0
L 771110A	.	<40.	.	0.030	0.0049	.	15.
L 771110B	.	<40.	.	0.070	0.011	.	<5.0
L 772110A	.	<40.	.	0.027	<0.001	.	22.
L 772110B	.	<40.	.	0.018	<0.001	.	23.
L 773110A	.	<40.	.	0.018	<0.001	<0.04	<5.0
L 773110B	.	<40.	.	0.021	<0.001	<0.04	<5.0
L 774110A	.	<40.	.	0.048	<0.001	<0.04	<5.0
L 774110B	.	<40.	.	0.043	<0.001	<0.04	<5.0
L 775110A	.	<40.	.	0.11	<0.001	<0.04	12.
L 775110B	.	<40.	.	<0.001	<0.001	<0.04	<5.0
L 776110A	.	<40.	.	0.22	0.0042	<0.04	<5.0
L 7761108	.	<40.	.	0.19	0.0040	<0.04	11.
L 771111A	.	<40.	.	0.076	<0.001	.	22.
L 771111B	.	<40.	.	0.065	0.0028	.	<5.0
L 772111A	.	<40.	.	0.028	0.0024	.	15.
L 772111B	.	<40.	.	0.27	<0.001	.	42.
L 773111A	.	<40.	.	0.36	<0.001	<0.04	<5.0
L 773111B	.	<40.	.	0.36	0.0066	<0.04	<5.0
L 774111A	.	<40.	.	1.2	0.0023	<0.04	<5.0
L 774111B	.	<40.	.	1.0	<0.001	<0.04	20.
L 775111A	.	<40.	.	0.96	<0.001	<0.04	22.
L 775111B	.	<40.	.	0.77	<0.001	0.060	11.
L 776111A	.	<40.	.	0.89	0.0024	<0.04	<5.0
L 776111B	.	<40.	.	0.78	0.0015	0.077	10.
L 711108A	.	<40.	.	0.020	<0.001	.	19.
L 711108B	.	<40.	.	0.039	0.0054	.	21.
L 711109A	.	<40.	.	0.014	<0.001	.	22.
L 711109B	.	<40.	.	0.016	<0.001	.	23.
L 711110A	.	<40.	.	0.039	<0.001	.	23.
L 711110B	.	<40.	.	0.064	<0.001	.	25.
L 711111A	.	<40.	.	0.045	<0.001	.	23.
L 711111B	.	.	.	.	.	.	.

	NI	PB	PH	SE	SI	SR	
L 170100*A	<0.02	<0.07	12.	<0.12	0.57	1200.	4.2
L 170100*B	<0.02	<0.07	12.	<0.12	0.61	1200.	3.9
L 170100A	<0.02	<0.07	12.	<0.12	0.75	1200.	1.0
L 170100B	<0.02	<0.07	12.	<0.12	0.58	1200.	2.1
L 170100C	<0.02	<0.07	12.	<0.12	0.39	1300.	2.8
L 170100D	0.048	<0.07	12.	<0.12	1.3	1200.	2.8
L 170100F	<0.02	<0.07	12.	<0.12	0.81	1200.	4.0
L 170100W	<0.02	<0.07	12.	<0.12	0.65	1300.	1.4
L 170100X	0.23	.	13.	.	2.8	1100.	2.7
L 170100Y	0.20	.	13.	.	2.3	1100.	2.7
L 170100Z	0.26	.	13.	.	2.5	1200.	2.6
	0.18	.	12.	.	1.9	1200.	2.9
L 170200A	0.29	.	12.	.	6.9	1200.	8.9
L 170200B	0.35	.	12.	.	3.9	1200.	8.1
L 170200C	0.31	.	12.	.	4.0	1200.	8.9
L 170200D	0.30	.	12.	.	6.6	1200.	8.6
L 170200E	0.30	.	12.	.	7.9	1200.	9.0
L 170200F	0.26	.	12.	.	3.1	1200.	9.0
L 170200G	0.32	.	12.	.	6.3	1200.	8.8
L 170200H	0.36	.	12.	.	9.1	1200.	7.9
L 170200I	0.32	.	12.	.	3.7	1200.	8.5
L 170200J	0.38	.	12.	.	6.8	1200.	9.3
L 170200K	0.31	.	12.	.	11.	1200.	9.1
L 170200L	0.27	.	12.	.	5.6	1200.	9.5
L 170300*A	0.042	.	12.	.	0.41	1100.	.
L 170300*AA	0.13	.	12.	.	0.61	1000.	18.
L 170300*B	0.041	.	12.	.	0.35	1100.	20.
L 170300*BB	0.054	.	12.	.	0.54	1200.	21.
L 170300*C	0.093	.	12.	.	0.43	1000.	.
L 170300*CC	0.060	.	12.	.	0.55	1100.	20.
L 170300*D	0.052	.	12.	.	0.48	1000.	23.
L 170300*E	0.067	.	12.	.	0.38	1200.	20.
L 170300*F	0.069	.	12.	.	0.58	1200.	21.
L 170300*H	0.14	.	13.	.	0.59	1100.	17.
L 170300*I	0.17	.	13.	.	0.66	1100.	17.
L 170300*J	0.12	.	12.	.	0.48	1200.	41.
L 170300*K	0.17	.	12.	.	0.73	1200.	16.
L 170300*L	0.17	.	12.	.	0.65	1200.	17.
L 170300*M	0.16	.	12.	.	0.68	1200.	37.
L 170300*N	0.14	.	12.	.	0.54	1200.	17.
L 170300*O	0.093	.	12.	.	0.62	1200.	32.
L 170300*P	0.12	.	12.	.	0.65	1200.	20.
L 170300*Q	0.18	.	12.	.	0.74	1200.	15.
L 170300*R	0.16	.	12.	.	0.70	1100.	17.
L 170300*S	0.21	.	12.	.	0.89	1100.	14.
L 170300*T	0.098	.	12.	.	0.51	1100.	19.
L 170300*U	0.15	.	12.	.	0.70	1100.	17.

	NI	PB	PH	SF	SI	S04	SR
L 170300+V	0.19	.	12.	.	0.80	1200.	15.
L 170300+W	0.22	.	12.	.	0.96	1200.	15.
L 170300+X	0.11	.	12.	.	0.54	1200.	19.
L 170300+Y	0.11	.	12.	.	0.52	1200.	20.
L 170300+Z	0.12	.	12.	.	0.54	1000.	19.
L 170400+A	0.039	.	12.	.	1.1	1400.	13.
L 170400+B	<0.01	.	12.	.	1.3	1500.	13.
L 170400A	<0.01	.	12.	.	2.4	1400.	14.
L 170400B	0.062	.	12.	.	2.6	1500.	13.
L 170400C	0.067	.	13.	.	2.9	1400.	13.
L 170400D	0.069	.	13.	.	4.8	1200.	13.
L 120100A	<0.02	<0.07	12.	<0.12	0.62	1400.	1.8
L 120100B	<0.02	<0.07	12.	<0.12	0.97	1400.	1.7
L 120100C	<0.02	<0.07	12.	<0.12	0.59	1700.	1.8
L 120100D	.	.	12.	.	.	1400.	.
L 120100E	<0.02	<0.07	12.	<0.12	0.41	1700.	2.0
L 120100F	<0.02	.	12.	.	0.38	1900.	4.1
L 110100A	<0.02	<0.07	12.	<0.12	0.98	1500.	1.4
L 110100B	<0.02	<0.07	12.	<0.12	0.62	2000.	1.4
L 110100C	<0.02	<0.07	12.	<0.12	0.61	1400.	1.3
L 110100D	<0.02	<0.07	12.	<0.12	1.5	1300.	1.5
L 110100E	<0.02	<0.07	12.	<0.12	2.4	1700.	1.4
L 110100F	<0.02	<0.07	12.	<0.12	1.3	1600.	1.4
L 470108A	0.64	.	8.4	.	0.046	720.	0.76
L 470108B	0.082	.	11.	.	1.3	720.	2.0
L 470108C	0.030	.	11.	.	2.8	720.	1.3
L 470108D	0.093	.	11.	.	3.0	700.	1.8
L 571108A	0.21	.	12.	.	0.65	910.	2.6
L 571108B	0413	.	12.	.	0.37	910.	2.9
L 572108A	0.20	.	12.	.	0.48	1000.	2.5
L 572108B	0416	.	12.	.	0.42	1000.	2.8
L 573108A	0.16	.	12.	.	0.38	1100.	2.7
L 573108B	0.23	.	12.	.	0.52	1100.	2.6
L 574108A	0417	.	12.	.	0.39	1100.	2.6
L 574108B	0.15	.	12.	.	0.29	1100.	2.6
L 575108A	0.22	.	12.	.	1.6	1100.	2.4
L 575108B	0.27	.	12.	.	1.8	1100.	2.1
L 576108A	0.32	.	12.	.	2.4	1200.	2.1
L 576108B	0.29	.	12.	.	1.9	1200.	2.1
L 671108A	<0.003	.	7.4	.	2.1	830.	0.86

	NI	PB	PH	SE	SI	SO4	SR
L 671108B	0.084	.	7.5	.	2.0	830.	0.71
L 672108A	<0.003	.	7.7	.	4.1	860.	0.80
L 672108B	0.075	.	8.0	.	4.6	890.	0.74
L 673108A	0.051	.	8.0	.	4.6	930.	0.69
L 673108B	0.072	.	8.0	.	4.7	910.	0.67
L 674108A	0.057	.	7.8	.	5.3	960.	0.72
L 674108B	0.010	.	7.8	.	5.5	970.	0.80
L 675108A	0.012	.	7.4	.	5.6	1000.	0.81
L 675108B	0.043	.	7.5	.	5.5	1000.	0.72
L 470109A	<0.02	<0.07	12.	<0.12	1.3	1200.	2.7
L 470109B	<0.02	<0.07	12.	<0.12	0.80	1200.	3.6
L 470109C	0.11	.	11.	.	1.3	1200.	2.5
L 470109D	0.15	.	11.	.	1.0	1100.	2.5
L 571109A	0.17	.	12.	.	0.43	1100.	2.7
L 571109B	0.16	.	12.	.	0.45	1100.	2.9
L 571109C	.	.	.	<0.005	.	.	.
L 571109D	.	.	.	<0.005	.	.	.
L 572109A	0.25	.	12.	.	0.60	1100.	2.4
L 572109B	0.39	.	12.	.	0.93	1100.	1.7
L 572109C	.	.	.	<0.005	.	.	.
L 572109D	.	.	.	<0.005	.	.	.
L 573109A	0.24	.	12.	.	0.48	1100.	2.4
L 573109B	0.43	.	12.	.	0.98	1200.	1.7
L 573109C	.	.	.	<0.005	.	.	.
L 573109D	.	.	.	<0.005	.	.	.
L 574109A	0.15	.	12.	.	0.31	1200.	2.6
L 574109B	0.21	.	12.	.	0.45	1200.	2.6
L 574109C	.	.	.	<0.005	.	.	.
L 574109D	.	.	.	<0.005	.	.	.
L 575109A	0.23	.	12.	.	1.7	1100.	2.3
L 575109B	0.23	.	12.	.	1.5	1100.	2.3
L 576109A	0.27	.	12.	.	2.1	1200.	2.3
L 576109B	0.29	.	12.	.	2.0	1200.	2.3
L 671109A	0.30	.	6.8	.	2.2	1300.	1.4
L 671109B	0.30	.	7.8	.	2.4	1300.	1.4
L 672109A	1.2	.	4.7	.	7.0	1400.	0.65
L 672109B	1.2	.	4.8	.	6.1	1400.	0.53
L 672109D	.	.	.	<0.005	.	.	.
L 672109E	.	.	.	<0.005	.	.	.
L 673109A	2.9	.	4.1	.	32.	1600.	2.1
L 673109B	2.5	.	4.0	.	25.	1600.	1.6
L 674109A	2.1	.	4.0	.	12.	1800.	0.58
L 674109B	4.0	.	4.0	.	43.	1800.	2.2
L 675109A	5.0	.	3.9	.	81.	2100.	2.5

	NI	PB	PH	SE	SI	SO4	SR
L 675109B	5.1	.	3.9	.	82.	2100.	2.6
L 470110A	0.16	.	12.	.	0.55	980.	2.4
L 470110B	0.19	.	12.	.	0.64	970.	2.1
L 470110C	<0.003	.	11.	.	1.1	980.	2.2
L 470110D	0.052	.	12.	.	1.2	1000.	1.7
L 571110A	0.19	.	12.	.	0.48	1000.	2.6
L 571110B	0.17	.	12.	.	0.44	1000.	2.7
L 572110A	0.21	.	12.	.	0.41	1100.	2.5
L 572110B	0.32	.	12.	.	0.66	1100.	1.9
L 573110A	0.44	.	12.	.	0.98	1200.	1.5
L 573110B	0.25	.	12.	.	0.53	1000.	2.4
L 574110A	0.21	.	12.	.	0.38	1200.	2.5
L 574110B	0.35	.	12.	.	0.72	1200.	1.5
L 575110A	0.27	.	12.	.	1.9	1200.	2.2
L 575110B	0.27	.	12.	.	1.9	1200.	2.2
L 576110A	0.38	.	12.	.	2.5	1200.	2.0
L 576110B	0.35	.	12.	.	2.4	1200.	2.1
L 671110A	<0.003	.	11.	.	7.3	940.	1.6
L 671110B	0.031	.	11.	.	7.1	970.	1.4
L 672110A	<0.003	.	7.6	.	3.9	1100.	1.4
L 672110B	0.039	.	7.5	.	3.6	1100.	1.1
L 673110A	0.027	.	7.9	.	5.4	1300.	1.1
L 673110B	0.057	.	7.9	.	5.9	1200.	1.1
L 674110A	0.019	.	7.6	.	5.9	1300.	1.2
L 674110B	0.068	.	7.6	.	5.9	1300.	1.0
L 675110A	0.049	.	7.5	.	6.2	1400.	1.1
L 675110B	0.023	.	7.6	.	6.5	1400.	1.2
L 470111A	<0.02	<0.07	.	<0.12	0.78	.	5.2
L 470111B	<0.02	<0.07	.	<0.12	1.7	.	6.0
L 671111A	<0.02	<0.07	.	<0.12	1.1	.	7.2
L 671111B	<0.02	<0.07	.	<0.12	1.6	.	4.9
L 470112A	0.19	.	11.	.	2.4	940.	1.1
L 470112B	0.19	.	7.4	.	2.6	940.	1.1
L 470112C	<0.003	.	13.	.	3.1	850.	0.88
L 470112D	<0.003	.	11.	.	3.5	850.	0.83
L 571112A	0.11	.	12.	.	0.79	880.	2.2

	NI	PB	PH	SE	SI	SO4	SR
L 571112B	0.13	.	12.	.	0.91	880.	2.2
L 572112A	0.16	.	12.	.	0.55	970.	2.6
L 572112B	0.14	.	12.	.	0.51	990.	2.6
L 573112A	0623	.	12.	.	0.55	1000.	2.5
L 573112B	0.36	.	12.	.	0.84	1000.	1.8
L 574112A	0.14	.	12.	.	0.40	1100.	2.6
L 574112B	0.17	.	12.	.	0.54	1100.	2.6
L 575112A	0.25	.	12.	.	2.0	1100.	2.4
L 575112B	0.28	.	12.	.	2.1	1100.	2.2
L 576112A	0.33	.	12.	.	2.8	1200.	2.2
L 576112B	0.34	.	12.	.	2.6	1200.	2.1
L 671112A	<0.003	.	8.6	.	3.6	860.	0.39
L 671112B	<0.003	.	8.8	.	2.8	860.	0.36
L 672112A	<0.003	.	7.7	.	4.3	880.	0.23
L 672112B	<0.003	.	7.7	.	4.3	900.	0.25
L 673112A	<0.003	.	7.8	.	5.4	870.	0.20
L 673112B	<0.003	.	7.8	.	5.5	880.	0.19
L 674112A	<0.003	.	7.8	.	5.8	850.	0.18
L 674112B	<0.003	.	7.8	.	6.2	860.	0.17
L 675112A	<0.003	.	8.0	.	6.3	890.	0.17
L 675112B	<0.003	.	8.1	.	5.9	880.	0.16
L 470113A	0.16	.	11.	.	1.1	740.	1.6
L 470113B	0.21	.	11.	.	1.3	740.	1.6
L 470113C	<0.003	.	11.	.	1.4	630.	1.5
L 470113D	<0.003	.	11.	.	1.8	670.	1.5
L 571113A	0.12	.	12.	.	0.45	960.	2.5
L 571113B	0.25	.	12.	.	0.72	970.	2.0
L 572113A	0.79	.	12.	.	2.1	1100.	0.67
L 572113B	0.69	.	12.	.	1.9	1100.	0.83
L 573113A	0.42	.	12.	.	1.1	1100.	1.3
L 573113B	0.58	.	12.	.	1.5	1100.	1.2
L 574113A	0.17	.	12.	.	0.53	1100.	2.4
L 574113B	0.18	.	12.	.	0.70	1100.	2.4
L 575113A	0.27	.	12.	.	2.3	1100.	2.2
L 575113B	0.26	.	12.	.	2.1	1100.	2.3
L 576113A	0.33	.	12.	.	2.6	1100.	2.3
L 576113B	0.31	.	12.	.	2.7	1100.	2.4
L 671113A	<0.003	.	10.	.	2.5	660.	0.75
L 671113B	<0.003	.	10.	.	3.0	670.	0.76
L 672113A	<0.003	.	6.9	.	4.4	660.	0.68
L 672113B	<0.003	.	6.8	.	4.9	640.	0.67
L 673113A	0.027	.	5.6	.	7.7	650.	0.65

	NI	PB	PH	SE	SI	SO4	SR
L 673113B	0.0060	.	5.8	.	7.5	610.	0.66
L 674113A	0.048	.	5.3	.	10.	610.	0.60
L 674113B	0.028	.	5.3	.	10.	610.	0.61
L 675113A	0.034	.	5.2	.	14.	590.	0.53
L 675113B	0.030	.	5.3	.	13.	610.	0.59
L 470114A	0.23	.	12.	.	1.4	720.	3.2
L 470114B	0.25	.	12.	.	1.0	760.	3.2
L 470114C	0.29	.	12.	.	0.95	690.	2.8
L 470114D	0.34	.	12.	.	1.1	710.	2.1
L 571114A	0.28	.	12.	.	0.75	1200.	2.4
L 571114B	0.64	.	12.	.	1.6	1200.	1.2
L 572114A	0.27	.	12.	.	0.63	1200.	2.4
L 572114B	0.27	.	12.	.	0.63	1100.	2.3
L 573114A	0.72	.	12.	.	1.9	1200.	0.66
L 573114B	0.62	.	12.	.	1.6	1200.	0.89
L 574114A	0.32	.	12.	.	0.77	1200.	1.6
L 574114B	0.19	.	12.	.	0.46	1100.	2.3
L 575114A	0.30	.	12.	.	2.2	1300.	2.5
L 575114B	0.26	.	12.	.	1.8	1300.	2.7
L 576114A	0.34	.	12.	.	2.4	1300.	2.5
L 576114B	0.33	.	12.	.	2.3	1400.	2.5
L 671114A	0.062	.	11.	.	3.3	530.	3.9
L 671114B	0.65	.	11.	.	2.9	510.	1.2
L 672114A	0.086	.	9.2	.	7.0	550.	4.0
L 672114B	0.093	.	9.2	.	7.0	550.	4.2
L 673114A	0.11	.	8.5	.	9.4	570.	3.4
L 673114B	0.10	.	8.3	.	9.5	580.	3.6
L 674114A	0.085	.	8.8	.	12.	630.	2.7
L 674114B	0.091	.	8.2	.	12.	690.	3.0
L 675114A	.	.	8.3	.	.	480.	.
L 675114B	.	.	8.2	.	.	490.	.
L 470308A	0.058	.	12.	.	1.7	470.	14.
L 470308B	0.058	.	12.	.	1.7	480.	14.
L 470308C	.	.	12.	.	.	600.	.
L 470308D	.	.	12.	.	.	580.	.
L 571308A	<0.003	.	12.	.	0.41	590.	24.
L 571308B	0.014	.	12.	.	0.44	690.	22.
L 572308A	0.080	.	12.	.	0.64	870.	23.
L 572308B	0.085	.	12.	.	0.46	780.	22.
L 573308A	0.11	.	12.	.	0.49	920.	21.

	NI	PB	PH	SE	SI	S04	SR
L 573308B	0.11	.	12.	.	0.49	920.	21.
L 574308A	0.11	.	12.	.	0.61	940.	20.
L 574308B	0.13	.	12.	.	0.61	930.	20.
L 575308A	0.11	.	12.	.	0.48	900.	21.
L 575308B	0.11	.	12.	.	0.46	910.	20.
L 576308A	0.082	.	12.	.	0.61	970.	19.
L 576308B	0.10	.	12.	.	0.58	810.	20.
L 577308A	0.10	.	12.	.	0.52	910.	19.
L 577308B	0.10	.	12.	.	0.42	910.	18.
L 578308A	0.13	.	12.	.	0.57	890.	19.
L 578308B	0.11	.	12.	.	0.55	900.	18.
L 579308A	0.17	.	12.	.	0.75	890.	16.
L 579308B	0.12	.	12.	.	0.53	990.	17.
L 671308A	0.060	.	9.2	.	1.8	640.	7.2
L 671308B	0.072	.	9.2	.	1.9	660.	7.1
L 672308A	0.055	.	8.1	.	4.5	750.	4.5
L 672308B	0.054	.	8.1	.	4.5	750.	4.5
L 673308A	0.048	.	8.0	.	5.6	840.	2.9
L 673308B	0.062	.	8.0	.	5.5	810.	2.9
L 674308A	0.067	.	7.7	.	6.5	760.	2.0
L 674308B	0.047	.	7.7	.	6.2	780.	2.1
L 675308A	0.062	.	7.7	.	6.5	890.	1.5
L 675308B	0.068	.	7.6	.	6.4	910.	1.5
L 470309A	<0.003	.	12.	.	0.90	750.	15.
L 470309B	<0.003	.	12.	.	0.99	750.	15.
L 470309C	0.14	.	12.	.	1.3	880.	12.
L 470309D	0.073	.	12.	.	1.3	900.	13.
L 571309A	<0.003	.	12.	.	0.32	830.	23.
L 571309B	<0.003	.	12.	.	0.38	830.	23.
L 572309A	0.11	.	12.	.	0.47	950.	21.
L 572309B	0.13	.	12.	.	0.52	960.	21.
L 573309A	0.13	.	12.	.	0.67	990.	20.
L 573309B	0.14	.	12.	.	0.68	990.	20.
L 574309A	0.13	.	12.	.	0.51	1000.	20.
L 574309B	0.12	.	12.	.	0.48	1000.	20.
L 575309A	0.11	.	12.	.	0.49	960.	20.
L 575309B	0.10	.	12.	.	0.41	960.	20.
L 576309A	0.11	.	12.	.	0.53	1000.	18.
L 576309B	0.10	.	12.	.	0.54	1000.	19.
L 577309A	0.16	.	12.	.	0.67	950.	17.
L 577309B	0.080	.	12.	.	0.47	950.	20.
L 578309A	0.17	.	12.	.	0.76	940.	17.
L 578309B	0.13	.	12.	.	0.61	940.	19.
L 579309A	0.17	.	12.	.	0.69	1000.	15.

	NI	PB	PH	SE	SI	SO4	SR
L 579309B	0.16	.	12.	.	0.69	1000.	16.
L 671309A	0.098	.	9.1	.	1.9	930.	8.0
L 671309B	0.086	.	9.1	.	2.1	930.	8.2
L 672309A	0.79	.	5.7	.	11.	1200.	6.0
L 672309B	0.80	.	5.4	.	11.	1200.	5.8
L 673309A	1.6	.	4.4	.	19.	1400.	4.7
L 673309B	1.6	.	4.4	.	19.	1400.	5.0
L 674309A	2.8	.	4.2	.	34.	1900.	5.0
L 674309B	2.8	.	4.2	.	34.	1800.	5.0
L 675309A	3.1	.	4.3	.	39.	1700.	4.4
L 675309B	3.1	.	4.2	.	38.	1700.	4.4
L 670310A	<0.003	.	12.	.	0.67	710.	19.
L 670310B	0.0090	.	12.	.	0.64	670.	19.
L 670310C	0.059	.	12.	.	2.7	720.	16.
L 670310D	0.076	.	12.	.	0.93	710.	16.
L 671310A	<0.003	.	12.	.	0.36	790.	23.
L 671310B	<0.003	.	12.	.	0.32	730.	23.
L 672310A	0.095	.	12.	.	0.42	900.	21.
L 672310B	0.070	.	12.	.	0.41	930.	22.
L 673310A	0.14	.	12.	.	0.70	970.	20.
L 673310B	0.13	.	12.	.	0.58	960.	20.
L 674310A	0.11	.	12.	.	0.39	960.	19.
L 674310B	0.13	.	12.	.	0.45	970.	19.
L 675310A	0.084	.	12.	.	0.43	930.	20.
L 675310B	0.11	.	12.	.	0.43	940.	20.
L 676310A	0.12	.	12.	.	0.66	1000.	18.
L 676310B	0.16	.	12.	.	0.72	1000.	14.
L 677310A	0.15	.	12.	.	0.68	900.	17.
L 677310B	0.13	.	12.	.	0.61	920.	15.
L 678310A	0.17	.	12.	.	0.76	890.	16.
L 678310B	0.10	.	12.	.	0.48	910.	20.
L 679310A	0.13	.	12.	.	0.61	1000.	17.
L 679310B	0.16	.	12.	.	0.69	1000.	17.
L 671310A	0.035	.	11.	.	8.0	740.	13.
L 671310B	0.031	.	11.	.	8.8	710.	13.
L 672310A	0.036	.	7.7	.	4.9	930.	9.8
L 672310B	0.042	.	7.7	.	4.9	940.	9.6
L 673310A	0.052	.	7.5	.	6.4	1000.	7.9
L 673310B	0.055	.	7.5	.	6.1	1000.	7.6
L 674310A	0.058	.	7.8	.	7.4	1300.	6.7
L 674310B	0.067	.	7.9	.	7.2	1300.	6.5
L 675310A	0.084	.	8.1	.	7.9	1400.	5.6

	NI	PB	PH	SE	SI	SO4	SR
L 675310B	0.089	.	8.1	.	7.8	1500.	5.5
L 470312A	<0.003	.	12.	.	2.6	560.	11.
L 470312B	<0.003	.	12.	.	3.2	550.	10.
L 470312C	0.036	.	12.	.	3.4	650.	10.
L 470312D	0.029	.	12.	.	3.5	660.	10.
L 571312A	0.0090	.	12.	.	0.73	590.	20.
L 571312B	<0.003	.	12.	.	0.63	590.	20.
L 572312A	0.093	.	12.	.	0.54	700.	22.
L 572312B	0.11	.	12.	.	0.56	700.	21.
L 573312A	0.13	.	12.	.	0.65	870.	20.
L 573312B	0.13	.	12.	.	0.55	890.	21.
L 574312A	0.12	.	12.	.	0.51	910.	21.
L 574312B	0.14	.	12.	.	0.64	900.	20.
L 575312A	0.12	.	12.	.	0.61	940.	21.
L 575312B	0.12	.	12.	.	0.49	960.	21.
L 576312A	0.14	.	12.	.	0.70	970.	17.
L 576312B	0.14	.	12.	.	0.65	970.	16.
L 577312A	0.14	.	12.	.	0.67	940.	16.
L 577312B	0.16	.	12.	.	0.73	910.	16.
L 578312A	0.15	.	12.	.	0.69	910.	17.
L 578312B	0.10	.	12.	.	0.52	910.	19.
L 579312A	0.14	.	12.	.	0.69	1000.	17.
L 579312B	0.18	.	12.	.	0.75	1000.	14.
L 671312A	0.027	.	8.3	.	3.6	690.	4.3
L 671312B	0.038	.	8.4	.	3.4	680.	4.3
L 672312A	0.023	.	7.8	.	5.3	610.	1.8
L 672312B	0.025	.	7.8	.	5.5	630.	1.8
L 673312A	0.021	.	8.1	.	6.3	660.	0.81
L 673312B	0.027	.	8.1	.	6.3	660.	0.80
L 674312A	0.0040	.	8.2	.	6.9	680.	0.41
L 674312B	<0.003	.	8.1	.	6.8	690.	0.40
L 675312A	0.0030	.	8.0	.	7.1	670.	0.24
L 675312B	0.023	.	8.0	.	7.0	670.	0.24
L 470313A	<0.003	.	12.	.	0.98	470.	16.
L 470313B	<0.003	.	12.	.	1.0	470.	17.
L 470313C	0.036	.	12.	.	0.89	510.	16.
L 470313D	0.028	.	12.	.	1.3	520.	17.
L 571313A	<0.003	.	12.	.	0.42	690.	24.
L 571313B	<0.003	.	12.	.	0.39	690.	23.
L 572313A	0.083	.	12.	.	0.70	800.	21.

	NI	PB	PH	SE	SI	SO4	SR
L 572313B	0.092	.	12.	.	0.52	820.	21.
L 573313A	0.20	.	12.	.	1.3	960.	18.
L 573313B	0.15	.	12.	.	0.68	960.	19.
L 574313A	0.13	.	12.	.	0.49	1000.	20.
L 574313B	0.13	.	12.	.	0.49	1000.	19.
L 575313A	0.096	.	12.	.	0.66	1000.	20.
L 575313B	0.10	.	12.	.	0.45	990.	20.
L 576313A	0.19	.	12.	.	0.78	1000.	13.
L 576313B	0.14	.	12.	.	0.73	1000.	18.
L 577313A	0.15	.	12.	.	0.68	920.	17.
L 577313B	0.18	.	12.	.	0.89	920.	15.
L 578313A	0.15	.	12.	.	0.66	1000.	17.
L 578313B	0.14	.	12.	.	0.67	1100.	18.
L 579313A	0.17	.	12.	.	0.83	1000.	15.
L 579313B	0.12	.	12.	.	0.51	1000.	18.
L 671313A	0.026	.	11.	.	3.8	490.	8.5
L 671313B	0.024	.	11.	.	3.7	500.	8.5
L 672313A	0.027	.	7.4	.	2.9	570.	5.8
L 672313B	0.025	.	7.3	.	3.9	510.	5.9
L 673313A	0.030	.	6.5	.	7.2	510.	4.1
L 673313B	0.033	.	6.2	.	7.1	510.	4.1
L 674313A	0.030	.	5.5	.	12.	460.	2.7
L 674313B	0.029	.	5.3	.	12.	460.	2.7
L 675313A	0.031	.	6.4	.	16.	450.	1.9
L 675313B	0.030	.	6.3	.	17.	450.	1.9
L 470314A	<0.003	.	12.	.	0.56	590.	21.
L 470314B	<0.003	.	12.	.	1.0	590.	22.
L 470314C	0.034	.	12.	.	1.2	590.	21.
L 470314D	0.030	.	12.	.	0.58	600.	21.
L 571314A	0.012	.	12.	.	0.39	1100.	23.
L 571314B	<0.003	.	12.	.	0.35	1100.	23.
L 572314A	0.14	.	13.	.	0.68	1100.	19.
L 572314B	0.11	.	12.	.	0.49	1100.	19.
L 573314A	0.15	.	12.	.	0.72	1100.	19.
L 573314B	0.15	.	12.	.	0.69	1100.	19.
L 574314A	0.15	.	12.	.	0.55	1300.	19.
L 574314B	0.13	.	12.	.	0.48	1300.	19.
L 575314A	0.12	.	12.	.	0.47	1200.	19.
L 575314B	0.12	.	12.	.	0.47	1200.	19.
L 576314A	0.14	.	12.	.	0.69	1100.	19.
L 576314B	0.14	.	12.	.	0.68	1200.	16.
L 577314A	0.17	.	12.	.	0.75	1000.	16.
L 577314B	0.19	.	12.	.	0.82	1000.	15.
L 578314A	0.11	.	12.	.	0.53	1200.	20.

	NI	PB	PH	SE	SI	SO4	SR
L 578314B	0.19	.	12.	.	0.79	1200.	17.
L 579314A	0.19	.	12.	.	0.76	1200.	15.
L 579314B	0.12	.	12.	.	0.58	1200.	18.
L 671314A	0.026	.	11.	.	4.2	430.	16.
L 671314B	0.027	.	11.	.	4.9	430.	16.
L 672314A	0.029	.	9.8	.	4.2	440.	10.
L 672314B	0.024	.	9.7	.	4.2	460.	10.
L 673314A	<0.003	.	8.0	.	4.8	430.	5.3
L 673314B	0.0030	.	8.0	.	4.7	440.	5.3
L 674314A	<0.003	.	7.7	.	6.2	450.	3.5
L 674314B	<0.003	.	7.8	.	6.1	450.	3.4
L 675314A	0.019	.	8.2	.	6.2	460.	2.3
L 675314B	0.023	.	8.1	.	6.1	460.	2.2
L 470408A	0.045	.	12.	.	2.4	970.	8.4
L 470408B	<0.01	.	12.	.	8.4	1000.	8.6
L 470409A	<0.01	.	12.	.	1.4	1200.	8.8
L 470409B	<0.01	.	12.	.	1.4	1200.	8.6
L 470410A	0.018	.	12.	.	1.8	1200.	11.
L 470410B	0.051	.	12.	.	.	1300.	10.
L 470412A	<0.01	.	12.	.	3.4	1100.	6.0
L 470412B	<0.01	.	12.	.	3.3	1100.	6.0
L 470413A	<0.01	.	12.	.	1.3	920.	8.9
L 470413B	0.025	.	12.	.	1.3	930.	9.1
L 470414A	<0.01	.	12.	.	1.0	1000.	12.
L 470414B					1.1	1000.	12.
L 420108A	0.11	.	12.	.	3.7	950.	2.3
L 420108B	0.12	.	12.	.	3.9	980.	2.3
L 420109A	0.21	.	12.	.	3.5	1300.	2.5
L 420109B	0.16	.	12.	.	3.1	1200.	2.4
L 420110A	0.20	.	12.	.	2.7	1200.	2.4
L 420110B	0.25	.	12.	.	3.1	1200.	2.3
L 420112A	0.13	.	12.	.	6.1	1100.	1.7
L 420112B	0.16	.	12.	.	6.1	1100.	1.6
L 420113A	0.16	.	12.	.	2.8	970.	2.0
L 420113B	0.17	.	12.	.	2.9	960.	2.0
L 420114A	0.15	.	12.	.	2.8	950.	3.8
L 420114B	0.19	.	12.	.	2.3	1000.	3.7
L 420308A	<0.003	.	12.	.	0.88	690.	17.
L 420308B	0.0030	.	12.	.	1.4	700.	17.
L 420309A	0.040	.	12.	.	1.1	930.	17.
L 420309B	0.037	.	12.	.	0.86	910.	17.
L 420310A	0.033	.	12.	.	1.1	930.	20.

	NI	PB	PH	SE	SI	SO4	SR
L 420310B	0.042	.	12.	.	0.57	940.	19.
L 420312A	0.038	.	12.	.	2.0	780.	13.
L 420312B	0.031	.	12.	.	2.0	780.	13.
L 420313A	<0.003	.	12.	.	0.84	680.	18.
L 420313B	<0.003	.	12.	.	0.64	680.	18.
L 420314A	<0.003	.	12.	.	0.75	610.	22.
L 420314B	<0.003	.	12.	.	0.47	610.	22.
L 410108A	<0.02	<0.07	12.	<0.12	1.6	940.	2.9
L 410108B	0.12	<0.07	12.	<0.12	1.3	970.	3.6
L 410109A	<0.02	<0.07	12.	<0.12	1.4	1300.	4.2
L 410109B	<0.02	<0.07	12.	<0.12	1.3	1300.	4.2
L 410110A	<0.02	<0.07	12.	<0.12	1.2	1200.	3.9
L 410110B	<0.02	<0.07	12.	<0.12	1.3	1200.	4.3
L 410111A	<0.02	<0.07	.	<0.12	1.3	.	5.5
L 410111B	<0.02	<0.07	.	<0.12	1.5	.	5.6
L 410112A	0.22	.	12.	.	6.8	1100.	1.5
L 410112B	0.27	.	12.	.	7.2	1200.	1.4
L 410113A	0.22	.	12.	.	4.0	1000.	1.9
L 410113B	0.25	.	12.	.	4.4	1100.	1.8.
L 410124A	0.25	.	12.	.	2.8	970.	3.0
L 410124B	0.26	.	12.	.	1.9	980.	3.0
L 410308A	0.038	.	12.	.	1.2	850.	18.
L 410308B	0.048	.	12.	.	1.6	840.	17.
L 410309A	0.031	.	12.	.	0.93	1000.	17.
L 410309B	0.030	.	12.	.	1.1	1000.	17.
L 410310A	0.040	.	12.	.	0.72	1100.	20.
L 410310B	0.051	.	12.	.	0.75	1100.	19.
L 410312A	0.028	.	12.	.	2.0	870.	14.
L 410312B	0.033	.	12.	.	2.0	880.	14.
L 410313A	0.029	.	12.	.	1.3	810.	19.
L 410313B	<0.003	.	12.	.	0.73	760.	18.
L 410314A	0.029	.	12.	.	0.58	660.	21.
L 410314B	0.032	.	12.	.	0.50	660.	21.
L 771108A	<0.02	<0.07	11.	<0.12	2.2	200.	0.46
L 771108B	0.16	<0.07	11.	<0.12	2.1	200.	0.54
L 772108A	<0.02	<0.07	11.	<0.12	1.1	220.	0.33
L 772108B	<0.02	<0.07	11.	<0.12	1.4	220.	0.32
L 773108A	<0.02	<0.07	11.	<0.12	1.1	170.	0.15
L 773108B	<0.02	<0.07	11.	<0.12	1.1	180.	0.16
L 774108A	0.033	0.090	10.	<0.12	1.3	170.	0.10
L 774108B	0.11	0.077	10.	<0.12	0.88	170.	0.095
L 775108A	<0.02	<0.07	10.	<0.12	1.8	150.	0.071
L 775108B	<0.02	<0.07	9.3	<0.12	0.80	170.	0.10
L 776108A	0.037	<0.07	.	<0.12	1.4	.	0.071

	NI	PB	PH	SE	SI	SO4	SR
L 776108B	<0.02	<0.07	.	<0.12	1.0	.	0.069
L 771109A	<0.02	<0.07	11.	<0.12	2.2	160.	0.50
L 771109B	.	.	11.	.	.	150.	.
L 772109A	<0.02	<0.07	11.	<0.12	1.8	150.	0.25
L 772109B	0.15	<0.07	11.	<0.12	1.2	150.	0.29
L 773109A	<0.02	<0.07	11.	<0.12	1.7	110.	0.18
L 773109B	<0.02	<0.07	11.	<0.12	1.7	110.	0.18
L 774109A	0.077	0.074	8.2	<0.12	1.2	110.	0.14
L 774109B	<0.02	<0.07	8.3	<0.12	1.3	140.	0.15
L 775109A	<0.02	<0.07	10.	<0.12	1.5	90.	0.070
L 775109B	<0.02	<0.07	9.4	<0.12	1.5	80.	0.10
L 776109A	<0.02	<0.07	.	<0.12	1.6	.	0.098
L 776109B	<0.02	<0.07	.	<0.12	1.6	.	0.096
L 771110A	0.17	<0.07	11.	<0.12	1.7	200.	0.44
L 771110B	0.061	<0.07	11.	<0.12	1.6	180.	0.45
L 772110A	<0.02	<0.07	11.	<0.12	1.1	220.	0.20
L 772110B	<0.02	<0.07	11.	<0.12	1.2	180.	0.19
L 773110A	<0.02	<0.07	11.	<0.12	1.1	180.	0.11
L 773110B	<0.02	0.078	11.	<0.12	1.1	170.	0.11
L 774110A	0.20	0.17	8.1	<0.12	0.85	110.	0.068
L 774110B	<0.02	<0.07	8.5	<0.12	0.91	130.	0.078
L 775110A	<0.02	<0.07	8.5	<0.12	0.77	160.	0.044
L 775110B	<0.02	0.094	8.8	<0.12	0.82	190.	0.063
L 776110A	<0.02	<0.07	.	<0.12	1.0	62.	0.047
L 776110B	<0.02	<0.07	.	<0.12	0.93	62.	0.049
L 771111A	<0.02	<0.07	11.	<0.12	1.6	160.	0.86
L 771111B	0.069	0.14	11.	<0.12	1.6	170.	0.92
L 772111A	0.070	<0.07	11.	<0.12	1.4	180.	0.32
L 772111B	<0.02	<0.07	11.	<0.12	0.83	200.	0.97
L 773111A	<0.02	<0.07	9.4	<0.12	1.0	.	0.16
L 773111B	<0.02	0.092	9.8	<0.12	1.1	.	0.16
L 774111A	0.13	0.33	7.4	<0.12	1.3	.	0.11
L 774111B	<0.02	<0.07	7.8	<0.12	1.5	.	0.11
L 775111A	<0.02	<0.07	7.5	<0.12	1.2	.	0.080
L 775111B	<0.02	<0.07	8.1	<0.12	1.3	.	0.085
L 776111A	<0.02	<0.07	.	<0.12	1.1	.	0.091
L 776111B	<0.02	<0.07	.	<0.12	1.1	.	0.083
L 711108A	<0.02	<0.07	11.	<0.12	1.6	44.	0.26
L 711108B	0.028	<0.07	11.	<0.12	1.7	200.	0.32
L 711109A	<0.02	<0.07	12.	<0.12	1.4	130.	0.42
L 711109B	<0.02	<0.07	11.	<0.12	1.3	130.	0.36
L 711110A	<0.02	<0.07	11.	<0.12	1.1	.	0.25
L 711110B	<0.02	<0.07	11.	<0.12	0.76	87.	0.61
L 711111A	<0.02	<0.07	11.	<0.12	0.93	130.	0.31
L 711111B	.	.	11.	.	.	.	.

	TDS	TI	TIC	TOC	U	V	ZN
L 170100*A	2300.	<0.002	.	1.1	<0.30	<0.01	0.21
L 170100*B	2200.	<0.002	.	.	<0.30	<0.01	0.27
L 170100A	2300.	<0.002	.	.	<0.30	<0.01	0.11
L 170100B	3800.	<0.002	.	.	<0.30	<0.01	0.10
L 170100C	3900.	<0.002	.	.	<0.30	<0.01	0.13
L 170100D	4200.	<0.002	.	.	<0.30	<0.01	0.092
L 170100E	4200.	<0.002	.	.	<0.30	<0.01	0.21
L 170100F	2900.	<0.002	.	.	<0.30	<0.01	0.30
L 170100W	.	0.16	.	.	.	0.27	0.015
L 170100X	.	0.13	.	1.3	.	0.22	0.0090
L 170100Y	.	0.16	.	1.4	.	0.33	0.015
L 170100Z	.	0.13	.	.	.	0.19	.
L 170200A	3800.	0.28	.	.	.	0.36	0.030
L 170200B	3800.	0.18	.	.	.	0.45	0.030
L 170200C	3600.	0.20	.	.	.	0.37	0.022
L 170200D	3900.	0.32	.	.	.	0.37	0.027
L 170200E	3200.	0.35	.	.	.	0.38	0.031
L 170200F	3400.	0.14	.	.	.	0.31	0.021
L 170200G	3600.	0.38	.	.	.	0.40	0.032
L 170200H	3500.	0.45	.	.	.	0.48	0.034
L 170200I	3400.	0.20	.	.	.	0.42	0.029
L 170200J	3300.	0.36	.	.	.	0.39	0.029
L 170200K	3100.	0.33	.	.	.	0.38	0.027
L 170200L	4000.	0.18	.	.	.	0.31	0.030
L 170300*A	3800.	0.076	.	.	.	0.076	0.010
L 170300*AA	3700.	0.41	.	.	.	0.38	0.049
L 170300*B	3900.	0.066	.	.	.	0.063	0.014
L 170300*BB	3600.	0.12	.	.	.	0.094	0.012
L 170300*C	3800.	0.18	.	.	.	0.17	0.047
L 170300*CC	3500.	0.15	.	.	.	0.12	0.017
L 170300*D	3800.	0.091	.	.	.	0.087	0.019
L 170300*E	3900.	0.15	.	.	.	0.15	0.029
L 170300*F	3900.	0.14	.	.	.	0.14	0.029
L 170300*H	3800.	0.38	.	.	.	0.33	0.055
L 170300*I	3900.	0.48	.	.	.	0.43	0.070
L 170300*J	3800.	0.32	.	.	.	0.28	0.044
L 170300*K	3800.	0.45	.	.	.	0.38	0.070
L 170300*L	3600.	0.45	.	.	.	0.38	0.071
L 170300*M	3700.	0.43	.	.	.	0.39	0.065
L 170300*N	3500.	0.37	.	.	.	0.34	0.056
L 170300*O	3600.	0.27	.	.	.	0.25	0.035
L 170300*P	3900.	0.48	.	.	.	0.37	0.036
L 170300*Q	3900.	0.67	.	.	.	0.50	0.057
L 170300*R	3800.	0.57	.	.	.	0.43	0.048
L 170300*S	3700.	0.81	.	.	.	0.61	0.073
L 170300*T	3700.	0.35	.	.	.	0.27	0.025
L 170300*U	3500.	0.55	.	.	.	0.42	0.043

	TDS	TI	TIC	TOC	U	V	ZN
L 170300+V	3700.	0.71	.	.	.	0.54	0.060
L 170300+W	3700.	0.83	.	.	.	0.62	0.073
L 170300+X	3800.	0.32	.	.	.	0.24	0.039
L 170300+Y	3800.	0.29	.	.	.	0.23	0.036
L 170300+Z	3700.	0.33	.	.	.	0.25	0.042
L 170400+A	4100.	<0.02	6.3	3.5	.	<0.01	<0.01
L 170400+B	4100.	<0.02	5.7	3.6	.	<0.01	<0.01
L 170400A	4100.	<0.02	6.3	3.5	.	<0.01	<0.01
L 170400B	4100.	<0.02	5.7	3.6	.	<0.01	<0.01
L 170400C	4000.	0.15	<2.0	4.4	.	0.027	<0.01
L 170400D	3700.	0.18	<2.0	4.6	.	0.035	<0.01
L 120100A	3700.	<0.002	.	.	<0.30	<0.01	0.42
L 120100B	.	<0.002	.	.	<0.30	<0.01	0.23
L 120100C	3600.	<0.002	.	.	<0.30	<0.01	0.35
L 120100D	2980.	.	.	1.4	.	.	.
L 120100E	4100.	<0.002	.	6.0	<0.30	<0.01	0.30
L 120100F	4000.	<0.002	.	.	.	<0.01	0.13
L 110100A	3600.	<0.002	.	.	<0.30	<0.01	0.45
L 110100B	4200.	<0.002	.	.	<0.30	<0.01	0.49
L 110100C	4100.	<0.002	.	.	<0.30	<0.01	0.52
L 110100D	4100.	<0.002	.	2.2	<0.30	<0.01	0.63
L 110100E	4100.	<0.002	.	0.96	<0.30	<0.01	0.41
L 110100F	2700.	<0.002	.	.	<0.30	<0.01	0.47
L 470108A	1300.	0.66	.	.	.	0.62	0.73
L 470108B	1300.	0.017	.	.	.	0.012	<0.002
L 470108C	1300.	0.15	.	.	.	0.13	0.022
L 470108D	1300.	0.36	.	.	.	0.28	0.052
L 571108A	2500.	0.050	.	.	.	0.12	0.016
L 571108B	2100.	0.028	.	.	.	0.046	<0.002
L 572108A	3000.	0.047	.	.	.	0.11	0.014
L 572108B	2800.	0.039	.	.	.	0.077	0.0065
L 573108A	2800.	0.040	.	.	.	0.068	0.0046
L 573108B	2900.	0.058	.	.	.	0.13	0.014
L 574108A	3000.	0.041	.	.	.	0.082	0.0084
L 574108B	3100.	0.035	.	.	.	0.057	0.0046
L 575108A	3200.	0.11	.	.	.	0.21	0.011
L 575108B	3100.	0.15	.	.	.	0.30	0.020
L 576108A	3400.	0.13	.	.	.	0.38	0.020
L 576108B	3400.	0.11	.	.	.	0.33	0.018
L 671108A	1300.	0.11	.	.	.	0.093	0.018

	TDS	TI	TIC	TOC	U	V	ZN
L 671108B	1400.	0.34	.	.	.	0.26	0.050
L 672108A	1500.	0.054	.	.	.	0.058	0.018
L 6721088	1600.	0.29	.	.	.	0.24	0.051
L 673108A	1900.	0.095	.	.	.	0.079	0.027
L 6731088	1700.	0.27	.	.	.	0.22	0.052
L 674108A	2000.	0.22	.	.	.	0.19	0.051
L 674108B	1800.	0.028	.	.	.	0.037	0.023
L 675108A	1800.	0.012	.	.	.	0.026	0.022
L 6751088	1800.	0.18	.	.	.	0.16	0.047
L 470109A	2300.	<0.002	.	.	<0.30	<0.01	0.25
L 470109B	1600.	<0.002	.	.	<0.30	<0.01	0.12
L 470109C	2100.	0.022	.	3.8	.	0.033	<0.002
L 470109D	2000.	0.029	.	5.1	.	0.057	0.0045
L 571109A	2600.	0.038	.	.	.	0.072	0.0056
L 571109B	2700.	0.034	.	.	.	0.062	0.0062
L 571109C	.	.	.	.	.	.	.
L 571109D	.	.	.	.	.	.	.
L 572109A	2700.	0.060	.	.	.	0.16	0.022
L 572109B	2800.	0.093	.	.	.	0.29	0.044
L 572109C	.	.	.	.	.	.	.
L 572109D	.	.	.	.	.	.	.
L 573109A	3000.	0.055	.	.	.	0.13	0.021
L 573109B	2900.	0.11	.	.	.	0.32	0.049
L 573109C	.	.	.	.	.	.	.
L 573109D	.	.	.	.	.	.	.
L 574109A	3100.	0.035	.	.	.	0.058	0.0047
L 574109B	3100.	0.049	.	.	.	0.11	0.014
L 574109C	.	.	.	.	.	.	.
L 574109D	.	.	.	.	.	.	.
L 575109A	3400.	0.13	.	.	.	0.27	0.015
L 575109B	3100.	0.12	.	.	.	0.22	0.015
L 576109A	3400.	0.12	.	.	.	0.34	0.021
L 576109B	3500.	0.13	.	.	.	0.35	0.021
L 671109A	2200.	0.075	.	.	.	0.24	0.040
L 671109B	2200.	0.074	.	.	.	0.25	0.036
L 672109A	2400.	0.17	.	.	.	0.64	0.84
L 672109B	2400.	0.17	.	.	.	0.65	0.76
L 672109D	.	.	.	.	.	.	.
L 672109E	.	.	.	.	.	.	.
L 673109A	2600.	0.047	.	.	.	0.27	4.0
L 673109B	2600.	0.072	.	.	.	0.33	3.6
L 674109A	2600.	0.22	.	.	.	0.84	2.8
L 674109B	2900.	0.043	.	.	.	0.31	6.1
L 675109A	3600.	0.13	.	.	.	0.73	9.2

	TDS	TI	TIC	TOC	U	V	ZN
L 675109B	3500.	0.11	.	.	.	0.71	9.2
L 670110A	2000.	0.036	.	.	.	0.072	0.0055
L 670110B	2300.	0.040	.	.	.	0.096	0.012
L 670110C	1700.	0.084	.	.	.	0.070	0.014
L 670110D	2100.	0.11	.	.	.	0.086	0.016
L 671110A	2800.	0.041	.	.	.	0.079	0.0067
L 671110B	2900.	0.042	.	.	.	0.077	0.010
L 672110A	3100.	0.046	.	.	.	0.094	0.014
L 6721108	3000.	0.075	.	.	.	0.21	0.030
L 673110A	3400.	0.11	.	.	.	0.32	0.045
L 673110B	3400.	0.061	.	.	.	0.14	0.020
L 674110A	3080.	0.050	.	.	.	0.10	0.012
L 674110B	3300.	0.085	.	.	.	0.24	0.033
L 675110A	3400.	0.15	.	.	.	0.32	0.014
L 675110B	3500.	0.15	.	.	.	0.38	0.017
L 676110A	3400.	0.18	.	.	.	0.50	0.030
L 676110B	3400.	0.20	.	.	.	0.47	0.031
L 671110A	1700.	0.012	.	.	.	0.023	0.0040
L 671110B	1600.	0.060	.	.	.	0.062	0.010
L 672110A	1900.	<0.005	.	.	.	<0.003	<0.003
L 6721108	2100.	0.064	.	.	.	0.052	0.015
L 673110A	3000.	0.057	.	.	.	0.047	0.032
L 673110B	2200.	0.056	.	.	.	0.059	0.036
L 674110A	2400.	0.024	.	.	.	0.026	0.039
L 674110B	2300.	0.086	.	.	.	0.079	0.048
L 675110A	2400.	0.0080	.	.	.	0.024	0.044
L 675110B	2400.	0.022	.	.	.	0.036	0.049
L 670111A	.	<0.002	.	.	<0.30	<0.01	0.12
L 670111B	.	<0.002	.	.	<0.30	<0.01	0.30
L 671111A	.	<0.002	.	.	<0.30	<0.01	0.14
L 671111B	.	<0.002	.	.	<0.30	<0.01	0.34
L 670112A	1700.	0.040	.	.	.	0.10	0.014
L 670112B	1600.	0.040	.	.	.	0.10	0.013
L 670112C	1600.	<0.005	.	.	.	<0.003	<0.003
L 670112D	1600.	0.034	.	.	.	0.0080	0.0060
L 671112A	1800.	0.022	.	.	.	0.035	<0.002

	TDS	TI	TIC	TOC	U	V	ZN
L 571112B	2100.	0.027	.	.	.	0.048	<0.002
L 572112A	2500.	0.037	.	.	.	0.064	0.010
L 572112B	2600.	0.029	.	.	.	0.048	0.0070
L 573112A	2300.	0.050	.	.	.	0.11	0.011
L 573112B	2800.	0.082	.	.	.	0.24	0.035
L 574112A	2800.	0.034	.	.	.	0.049	0.0022
L 574112B	2900.	0.042	.	.	.	0.081	0.0086
L 575112A	3300.	0.13	.	.	.	0.27	0.013
L 575112B	3300.	0.13	.	.	.	0.31	0.019
L 576112A	3200.	0.20	.	.	.	0.44	0.027
L 576112B	3200.	0.20	.	.	.	0.46	0.027
L 671112A	1400.	<0.005	.	.	.	<0.003	<0.003
L 671112B	1400.	0.018	.	.	.	0.0070	<0.003
L 672112A	1500.	0.012	.	.	.	0.0040	0.012
L 672112B	1600.	<0.005	.	.	.	<0.003	<0.003
L 673112A	1500.	<0.005	.	.	.	<0.003	0.010
L 673112B	1400.	0.0070	.	.	.	<0.003	0.018
L 674112A	1700.	<0.005	.	.	.	<0.003	0.013
L 674112B	1400.	0.0060	.	.	.	<0.003	0.019
L 675112A	1400.	<0.005	.	.	.	<0.003	0.020
L 675112B	1400.	0.0080	.	.	.	0.0050	0.020
L 970113A	1100.	0.040	.	3.7	J	0.092	0.012
L 970113B	1000.	0.052	.	3.9	.	0.14	0.018
L 970113C	1300.	0.017	.	.	.	0.013	<0.003
L 970113D	1300.	0.013	.	.	.	0.0090	0.0060
L 571113A	2700.	0.034	.	.	.	0.059	0.0087
L 571113B	2300.	0.066	.	.	.	0.17	0.028
L 572113A	3300.	0.20	.	.	.	0.69	0.11
L 572113B	3200.	0.17	.	.	.	0.59	0.086
L 573113A	3500.	0.11	.	.	.	0.33	0.050
L 573113B	3300.	0.15	.	.	.	0.49	0.076
L 574113A	3000.	0.049	.	.	.	0.087	0.011
L 574113B	3300.	0.061	.	.	.	0.12	0.020
L 575113A	3600.	0.16	.	.	.	0.35	0.017
L 575113B	3500.	0.15	.	.	.	0.29	0.019
L 576113A	3600.	0.21	.	.	.	0.42	0.025
L 576113B	3500.	0.19	.	.	.	0.37	0.022
L 671113A	1100.	0.0090	.	.	.	0.0090	<0.003
L 671113B	1100.	0.0060	.	.	.	<0.003	<0.003
L 672113A	1200.	<0.005	.	.	.	0.019	0.0040
L 672113B	1100.	0.0060	.	.	.	0.016	<0.003
L 673113A	1100.	<0.005	.	.	.	0.023	0.011

	TDS	TI	TIC	TOC	U	V	ZN
L 6731138	1000.	<0.005	.	.	.	0.016	<0.003
L 674113A	1000.	0.011	.	.	.	0.028	0.021
L 6741138	930.	<0.005	.	.	.	0.014	0.014
L 675113A	910.	0.010	.	.	.	0.022	0.025
L 6751138	1000.	<0.005	.	.	.	0.0070	0.016
L 970114A	.	0.058	.	2.7	.	0.17	0.023
L 4701148	1600.	0.064	.	2.6	.	0.19	0.026
L 970114C	2000.	0.076	.	.	.	0.22	0.035
L 970114D	1400.	0.089	.	.	.	0.28	0.047
L 571114A	3600.	0.074	.	.	.	0.20	0.029
L 571114B	1900.	0.16	.	.	.	0.54	0.083
L 572114A	3900.	0.073	.	.	.	0.17	0.025
L 5721148	3800.	0.073	.	.	.	0.18	0.031
L 573114A	4080.	0.19	.	.	.	0.65	0.098
L 573114B	3600.	0.16	.	.	.	0.54	0.085
L 574114A	3800.	0.087	.	.	.	0.25	0.037
L 574114B	3500.	0.058	.	.	.	0.13	0.016
L 575114A	4300.	0.18	.	.	.	0.37	0.021
L 5751148	3900.	0.16	.	.	.	0.31	0.019
L 576114A	3900.	0.17	.	.	.	0.43	0.027
L 5761148	4080.	0.20	.	.	.	0.43	0.026
L 671114A	1100.	0.021	.	.	.	0.052	0.010
L 6711148	1100.	0.16	.	.	.	0.59	0.093
L 672114A	1200.	0.043	.	.	.	0.13	<0.002
L 6721148	1300.	0.011	.	.	.	0.13	0.0041
L 673114A	1400.	0.037	.	.	.	0.23	0.0079
L 6731148	1400.	0.047	.	.	.	0.21	0.0076
L 674114A	1300.	0.018	.	.	.	0.23	0.0032
L 6741148	1400.	0.047	.	.	.	0.26	0.0064
L 675114A	1300.	.	.	.	.	.	.
L 6751148	1300.	.	.	.	.	.	.
L 470308A	1500.	0.13	.	.	.	0.12	0.019
L 470308B	1400.	0.13	.	.	.	0.13	0.019
L 470308C	1500.	.	.	.	.	.	.
L 470308D	1400.	.	.	.	.	.	.
L 571308A	2400.	0.034	.	.	.	0.055	<0.003
L 5713088	2500.	0.059	.	.	.	0.058	0.0060
L 572308A	2500.	0.20	.	.	.	0.19	0.030
L 5723088	2300.	0.27	.	.	.	0.18	0.029
L 573308A	3000.	0.28	.	.	.	0.25	0.039

	TDS	TI	TIC	TOC	U	V	ZN
L 573308B	2900.	0.27	•	•	•	0.24	0.039
L 574308A	3000.	0.28	•	•	•	0.25	0.044
L 574308B	3000.	0.30	•	•	•	0.27	0.048
L 575308A	3000.	0.25	•	•	•	0.23	0.039
L 575308B	3000.	0.28	•	•	•	0.25	0.042
L 576308A	3000.	0.27	•	•	•	0.21	0.019
L 576308B	3100.	0.36	•	•	•	0.28	0.024
L 577308A	3100.	0.34	•	•	•	0.25	0.029
L 577308B	3200.	0.29	•	•	•	0.21	0.026
L 578308A	3100.	0.43	•	•	•	0.33	0.039
L 578308B	3200.	0.39	•	•	•	0.30	0.033
L 579308A	3000.	0.68	•	•	•	0.52	0.058
L 579308B	3000.	0.41	•	•	•	0.32	0.034
L 671308A	1200.	0.11	•	•	•	0.10	0.015
L 671308B	1200.	0.14	•	•	•	0.13	0.022
L 672308A	1500.	0.098	•	•	•	0.097	0.019
L 672308B	1600.	0.18	•	•	•	0.10	0.021
L 673308A	1800.	0.099	•	•	•	0.079	0.010
L 673308B	1700.	0.14	•	•	•	0.095	0.019
L 674308A	1700.	0.17	•	•	•	0.14	0.022
L 674308B	1800.	0.080	•	•	•	0.079	0.012
L 675308A	1800.	0.20	•	•	•	0.17	0.027
L 675308B	1800.	0.19	•	•	•	0.16	0.024
L 470309A	2100.	0.035	•	•	•	0.052	<0.003
L 470309B	2100.	0.033	•	•	•	0.032	<0.003
L 470309C	2100.	0.51	•	•	•	0.40	0.041
L 470309D	2100.	0.23	•	•	•	0.18	0.013
L 571309A	2800.	0.035	•	•	•	0.031	<0.003
L 571309B	2900.	0.050	•	•	•	0.052	<0.003
L 572309A	2700.	0.20	•	•	•	0.23	0.042
L 572309B	2800.	0.31	•	•	•	0.27	0.048
L 573309A	3100.	0.36	•	•	•	0.34	0.057
L 573309B	3100.	0.40	•	•	•	0.37	0.058
L 574309A	3300.	0.32	•	•	•	0.29	0.052
L 574309B	3200.	0.30	•	•	•	0.27	0.048
L 575309A	3200.	0.27	•	•	•	0.25	0.053
L 575309B	3200.	0.24	•	•	•	0.21	0.039
L 576309A	3300.	0.36	•	•	•	0.27	0.032
L 576309B	3200.	0.34	•	•	•	0.26	0.027
L 577309A	3300.	0.56	•	•	•	0.42	0.052
L 577309B	3300.	0.27	•	•	•	0.20	0.023
L 578309A	3200.	0.65	•	•	•	0.51	0.056
L 578309B	3300.	0.51	•	•	•	0.40	0.044
L 579309A	2900.	0.62	•	•	•	0.47	0.059

	TDS	TI	TIC	TOC	U	V	ZN
L 579309B	2900.	0.60	.	.	.	0.45	0.055
L 671309A	1900.	0.30	.	.	.	0.23	0.025
L 671309B	1800.	0.26	.	.	.	0.19	0.021
L 672309A	2000.	0.28	.	.	.	0.21	0.67
L 672309B	2000.	0.36	.	.	.	0.27	0.72
L 673309A	1900.	0.27	.	.	.	0.20	2.1
L 673309B	2000.	0.25	.	.	.	0.19	2.3
L 674309A	2300.	0.12	.	.	.	0.090	4.8
L 674309B	2300.	0.12	.	.	.	0.11	4.8
L 675309A	2400.	0.083	.	.	.	0.045	6.3
L 675309B	2300.	0.082	.	.	.	0.057	6.2
L 670310A	2300.	0.035	.	.	.	0.057	<0.003
L 670310B	2300.	0.055	.	.	.	0.067	0.0070
L 670310C	1600.	0.13	.	.	.	0.093	0.0070
L 670310D	1500.	0.19	.	.	.	0.15	0.013
L 571310A	3100.	0.059	.	.	.	0.064	<0.003
L 571310B	2800.	0.043	.	.	.	0.041	<0.003
L 572310A	2700.	0.23	.	.	.	0.21	0.033
L 572310B	2900.	0.21	.	.	.	0.20	0.025
L 573310A	3100.	0.39	.	.	.	0.35	0.058
L 573310B	3200.	0.34	.	.	.	0.29	0.051
L 574320A	3200.	0.26	.	.	.	0.22	0.044
L 574310B	3100.	0.29	.	.	.	0.24	0.053
L 575310A	3200.	0.18	.	.	.	0.17	0.030
L 575310B	3300.	0.25	.	.	.	0.22	0.040
L 576320A	3200.	0.45	.	.	.	0.34	0.034
L 576320B	3200.	0.63	.	.	.	0.48	0.054
L 577310A	3300.	0.52	.	.	.	0.39	0.045
L 577310B	3300.	0.45	.	.	.	0.34	0.039
L 578310A	3400.	0.69	.	.	.	0.54	0.059
L 578310B	3500.	0.34	.	.	.	0.27	0.028
L 579320A	3100.	0.48	.	.	.	0.36	0.041
L 579320B	2800.	0.59	.	.	.	0.45	0.051
L 671310A	1300.	0.045	.	.	.	0.037	0.0040
L 671310B	1300.	0.043	.	.	.	0.066	0.0040
L 672310A	1800.	0.055	.	.	.	0.050	0.012
L 672310B	1700.	0.049	.	.	.	0.026	0.015
L 673310A	2200.	0.073	.	.	.	0.058	0.027
L 673310B	2200.	0.057	.	.	.	0.034	0.028
L 674320A	2500.	0.045	.	.	.	0.040	0.036
L 674320B	2600.	0.075	.	.	.	0.057	0.042
L 675310A	2800.	0.10	.	.	.	0.083	0.058

	TDS	TI	TIC	TOC	U	V	ZN
L 675310B	2200.	0.11	.	.	.	0.077	0.055
L 470312A	1500.	0.013	.	.	.	0.027	<0.003
L 470312B	1400.	0.033	.	.	.	0.044	<0.003
L 470312C	1400.	0.031	.	.	.	0.018	0.0040
L 470312D	1300.	0.020	.	.	.	0.023	<0.003
L 571312A	2100.	0.026	.	.	.	0.033	<0.003
L 571312B	2100.	0.021	.	.	.	0.023	<0.003
L 572312A	2300.	0.22	.	.	.	0.20	0.029
L 572312B	2300.	0.24	.	.	.	0.21	0.035
L 573312A	2700.	0.28	.	.	.	0.24	0.044
L 573312B	2600.	0.29	.	.	.	0.25	0.047
L 574312A	2900.	0.25	.	.	.	0.23	0.041
L 574312B	2800.	0.32	.	.	.	0.30	0.052
L 575312A	2900.	0.26	.	.	.	0.24	0.043
L 575312B	2900.	0.26	.	.	.	0.24	0.041
L 576312A	3100.	0.47	.	.	.	0.35	0.037
L 576312B	3100.	0.46	.	.	.	0.34	0.039
L 577312A	3200.	0.46	.	.	.	0.34	0.040
L 577312B	3200.	0.53	.	.	.	0.40	0.048
L 578312A	3300.	0.54	.	.	.	0.40	0.045
L 578312B	3500.	0.35	.	.	.	0.28	0.025
L 579312A	3000.	0.49	.	.	.	0.37	0.041
L 579312B	2700.	0.64	.	.	.	0.48	0.056
L 671312A	1300.	0.033	.	.	.	0.021	0.0040
L 671312B	1300.	0.023	.	.	.	0.0060	0.0080
L 672312A	1300.	0.019	.	.	.	0.0070	0.0070
L 672312B	1600.	0.020	.	.	.	0.018	0.0070
L 673312A	1300.	0.0070	.	.	.	<0.003	0.011
L 673312B	1500.	0.014	.	.	.	<0.003	0.012
L 674312A	1700.	0.0060	.	.	.	0.013	0.014
L 674312B	1600.	0.0080	.	.	.	0.0070	0.014
L 675312A	.	<0.005	.	.	.	0.0080	0.015
L 675312B	1800.	<0.005	.	.	.	<0.003	0.015
L 470313A	1800.	0.026	.	.	.	0.034	<0.003
L 470313B	1700.	0.024	.	.	.	0.029	<0.003
L 470313C	1700.	0.026	.	.	.	0.019	<0.003
L 470313D	1900.	0.044	.	.	.	0.053	<0.003
L 571313A	2800.	0.047	.	.	.	0.047	<0.003
L 571313B	2800.	0.068	.	.	.	0.057	<0.003
L 572313A	3300.	0.21	.	.	.	0.20	0.028

	TDS	TI	TIC	TOC	U	V	ZN
L 572323B	3200.	0.23	.	.	.	0.22	0.032
L 573313A	3000.	0.52	.	.	.	0.47	0.079
L 573313B	3000.	0.37	.	.	.	0.34	0.060
L 574313A	3200.	0.33	.	.	.	0.31	0.049
L 574313B	3300.	0.33	.	.	.	0.31	0.049
L 575313A	3200.	0.25	.	.	.	0.22	0.039
L 575313B	3100.	0.25	.	.	.	0.22	0.039
L 576313A	3300.	0.68	.	.	.	0.50	0.061
L 576313B	3300.	0.49	.	.	.	0.36	0.040
L 577313A	3300.	0.52	.	.	.	0.39	0.046
L 577313B	3300.	0.63	.	.	.	0.47	0.058
L 578313A	3500.	0.58	.	.	.	0.46	0.048
L 578313B	3500.	0.50	.	.	.	0.38	0.041
L 579313A	3100.	0.59	.	.	.	0.44	0.054
L 579313B	2900.	0.42	.	.	.	0.31	0.033
L 671313A	910.	0.017	.	.	.	0.034	<0.003
L 671313B	1300.	0.016	.	.	.	0.033	<0.003
L 672313A	970.	0.0070	.	.	.	<0.003	<0.003
L 672313B	1100.	0.016	.	.	.	0.0090	0.0040
L 673313A	930.	0.013	.	.	.	0.026	<0.002
L 673313B	1000.	0.024	.	.	.	<0.003	0.010
L 674313A	1300.	<0.005	.	.	.	0.0040	0.015
L 674313B	1300.	0.014	.	.	.	0.014	0.017
L 675313A	1200.	<0.005	.	.	.	0.0070	0.020
L 675313B	1000.	<0.005	.	.	.	<0.003	0.020
L 470314A	2100.	0.029	.	.	.	0.034	<0.003
L 470314B	2100.	0.024	.	.	.	0.037	<0.003
L 470314C	2400.	0.039	.	.	.	0.073	<0.003
L 470314D	1400.	0.050	.	.	.	0.072	<0.003
L 571314A	3500.	0.073	.	.	.	0.087	0.011
L 571314B	3300.	0.068	.	.	.	0.054	<0.003
L 572314A	3700.	0.40	.	.	.	0.38	0.059
L 572314B	3600.	0.28	.	.	.	0.26	0.042
L 573314A	3400.	0.41	.	.	.	0.38	0.060
L 573314B	3400.	0.41	.	.	.	0.37	0.062
L 574314A	3500.	0.40	.	.	.	0.35	0.063
L 574314B	3500.	0.32	.	.	.	0.29	0.051
L 575314A	3700.	0.28	.	.	.	0.25	0.044
L 575314B	3700.	0.31	.	.	.	0.28	0.046
L 576314A	3600.	0.52	.	.	.	0.40	0.052
L 576314B	3600.	0.50	.	.	.	0.37	0.047
L 577314A	3600.	0.64	.	.	.	0.50	0.057
L 577314B	3600.	0.74	.	.	.	0.56	0.063
L 578314A	3700.	0.41	.	.	.	0.31	0.032

	TDS	TI	TIC	TOC	U	V	ZN
L 578314B	3700.	0.72	.	.	.	0.55	0.059
L 579314A	3400.	0.71	.	.	.	0.54	0.062
L 579314B	3400.	0.45	.	.	.	0.35	0.039
L 671314A	740.	<0.005	.	.	.	0.015	<0.003
L 671314B	640.	<0.005	.	.	.	0.013	<0.003
L 672314A	770.	<0.005	.	.	.	<0.003	<0.003
L 672314B	710.	<0.005	.	.	.	0.0050	<0.004
L 673314A	1000.	<0.005	.	.	.	<0.003	<0.003
L 673314B	830.	<0.005	.	.	.	<0.003	<0.003
L 674314A	680.	<0.005	.	.	.	<0.003	0.0050
L 674314B	840.	<0.005	.	.	.	0.011	<0.003
L 675314A	940.	<0.005	.	.	.	<0.003	0.0030
L 675314B	760.	<0.005	.	.	.	<0.003	0.0050
L 470408A	1800.	<0.02	<2.0	7.7	.	<0.01	<0.01
L 470408B	11004	<0.02	<2.0	7.6	.	<0.01	<0.01
L 470409A	25004	<0.02	<2.0	6.1	.	<0.01	<0.01
L 470409B	2300.	<0.02	<2.0	6.0	.	<0.01	<0.01
L 470410A	1900.	<0.02	2.2	4.9	.	<0.01	<0.01
L 470410B	1500.	<0.02	<2.0	4.7	.	<0.01	<0.01
L 470412A	1900.	<0.02	<2.0	11.	.	<0.01	<0.01
L 470412B	2100.	<0.02	<2.0	10.	.	<0.01	<0.01
L 470413A	1600.	<0.02	<2.0	7.2	.	<0.01	<0.01
L 470413B	1500.	<0.02	<2.0	6.9	.	<0.01	<0.01
L 470414A	1900.	<0.02	<2.0	5.4	.	<0.01	<0.01
L 470414B	1700.	<0.02	<2.0	.	.	<0.01	<0.01
L 420108A	2100.	0.066	.	.	.	0.13	<0.002
L 420108B	2300.	0.073	.	.	.	0.13	<0.002
L 420109A	2600.	0.13	.	.	.	0.30	.
L 420109B	2700.	0.095	.	.	.	0.22	<0.002
L 420110A	2900.	0.12	.	.	.	0.26	<0.002
L 420110B	2900.	0.14	.	.	.	0.37	0.0060
L 420112A	2200.	0.069	.	.	.	0.13	<0.002
L 420112B	2300.	0.090	.	.	.	0.19	<0.002
L 420113A	2400.	0.095	.	.	.	0.22	<0.002
L 420113B	2300.	0.094	.	.	.	0.22	<0.002
L 420114A	2500.	0.089	.	.	.	0.18	<0.002
L 420114B	2400.	0.11	.	.	.	0.26	<0.002
L 420308A	20004	0.023	.	.	.	0.038	<0.003
L 420308B	2000.	0.049	.	.	.	0.072	<0.003
L 420309A	2400.	0.052	.	.	.	0.064	0.0070
L 420309B	2200.	0.066	.	.	.	0.072	0.0040
L 420310A	2800.	0.076	.	.	.	0.083	0.0060

	TOS	TI	TIC	TOC	U	V	ZN
L 4203108	2800.	0.076	.	.	.	0.063	0.010
L 420312A	1900.	0.052	.	.	.	0.052	0.0090
L 420312B	1900.	0.020	.	.	.	0.034	<0.003
L 420313A	2100.	0.015	.	.	.	0.027	<0.003
L 420313B	2000.	0.022	.	.	.	0.027	<0.003
L 420314A	2000.	0.014	.	.	.	0.026	<0.003
L 4203148	2100.	0.021	.	.	.	0.045	<0.003
L 4I0108A	1500.	<0.002	.	.	<0.30	<0.01	0.21
L 4I0108B	2100.	<0.002	.	.	<0.30	<0.01	0.14
L 4I0109A	2900.	<0.002	.	.	<0.30	<0.01	0.28
L 4I0109B	2500.	<0.002	.	.	<0.30	<0.01	0.30
L 4I0110A	3000.	<0.002	.	.	<0.30	<0.01	0.23
L 4I0110B	2500.	<0.002	.	.	<0.30	<0.01	0.26
L 4I0111A	.	<0.002	.	.	<0.30	<0.01	0.23
L 4I0111B	.	<0.002	.	.	<0.30	<0.01	0.27
L 4I0112A	2400.	0.13	.	.	.	0.33	0.0090
L 4I0112B	2400.	0.16	.	.	.	0.43	0.012
L 4I0113A	2700.	0.13	.	.	.	0.33	0.0090
L 4I0113B	2700.	0.15	.	.	.	0.37	0.011
L 4I0114A	2700.	0.14	.	.	.	0.38	0.011
L 4I0114B	2700.	0.17	.	.	.	0.41	0.021
L 4I0308A	2300.	0.032	.	.	.	0.054	<0.003
L 4I0308B	2300.	0.055	.	.	.	0.042	0.0060
L 4I0309A	2400.	0.040	.	.	.	0.052	<0.003
L 4I0309B	2000.	0.042	.	.	.	0.054	<0.003
L 4I0310A	3100.	0.065	.	.	.	0.049	0.0090
L 4I0310B	3100.	0.13	.	.	.	0.12	0.012
L 4I0312A	2200.	0.036	.	.	.	0.030	<0.003
L 4I0312B	2000.	0.047	.	.	.	0.083	<0.003
L 4I0313A	2400.	0.054	.	.	.	0.080	<0.003
L 4I0313B	2300.	0.030	.	.	.	0.047	<0.003
L 4I0314A	2100.	0.034	.	.	.	0.062	<0.003
L 4I0314B	2100.	0.045	.	.	.	0.052	<0.003
L 771108A	.	<0.002	.	.	<0.30	<0.01	0.086
L 771108B	.	<0.002	.	.	<0.30	0.023	0.079
L 772108A	.	<0.002	.	.	<0.30	<0.01	0.051
L 772108B	.	<0.002	.	.	<0.30	<0.01	0.046
L 773108A	.	<0.002	.	.	.	<0.01	0.023
L 773108B	.	<0.002	.	.	.	<0.01	0.0084
L 774108A	.	0.013	.	.	.	<0.01	0.024
L 774108B	.	0.012	.	.	.	<0.01	<0.002
L 775108A	.	<0.002	.	.	.	<0.01	0.0053
L 775108B	.	0.0038	.	.	.	<0.01	<0.002
L 776108A	.	<0.002	.	.	.	<0.01	<0.002

	TDS	TI	TIC	TOC	U	V	ZN
L 776108B	.	<0.002	.	.	.	<0.01	<0.002
L 771109A	.	<0.002	.	.	<0.30	<0.01	0.11
L 771109B	.	.	.	.	.	.	.
R 772109A	.	<0.002	.	.	<0.30	<0.01	<0.002
L 772109B	.	<0.002	.	.	<0.30	0.019	0.028
L 773109A	.	0.0048	.	.	.	<0.01	0.0033
L 773109B	.	<0.002	.	.	.	<0.01	<0.002
L 774109A	.	0.0095	.	.	.	<0.01	<0.002
L 774109B	.	0.0039	.	.	.	<0.01	<0.002
L 775109A	.	<0.002	.	.	.	<0.01	0.017
L 775109B	.	0.0062	.	.	.	<0.01	0.052
L 776109A	.	<0.002	.	.	.	<0.01	0.41
L 776109B	.	<0.002	.	.	.	<0.01	0.75
L 771110A	.	<0.002	.	.	<0.30	<0.01	0.073
L 771110B	.	<0.002	.	.	<0.30	0.017	0.10
L 772110A	.	<0.002	.	.	<0.30	<0.01	0.049
L 772110B	.	<0.002	.	.	<0.30	<0.01	0.0054
L 773110A	.	0.0044	.	.	.	<0.01	0.0040
L 773110B	.	0.0079	.	.	.	<0.01	<0.002
L 774110A	.	0.012	.	.	.	<0.01	<0.002
L 774110B	.	0.0058	.	.	.	<0.01	0.0042
L 775110A	.	<0.002	.	.	.	<0.01	<0.002
L 775110B	.	0.0065	.	.	.	<0.01	<0.002
L 776110A	.	<0.002	.	.	.	<0.01	<0.002
L 776110B	.	<0.002	.	.	.	<0.01	<0.002
L 771111A	.	<0.002	.	.	<0.30	<0.01	0.091
L 771111B	.	<0.002	.	.	<0.30	0.021	0.093
L 772111A	.	<0.002	.	.	<0.30	0.025	0.023
L 772111B	.	<0.002	.	.	<0.30	<0.01	0.083
L 773111A	.	0.012	.	.	.	<0.01	<0.002
L 773111B	.	0.0075	.	.	.	<0.01	0.016
L 774111A	.	0.023	.	.	.	<0.01	<0.002
L 774111B	.	<0.002	.	.	.	<0.01	<0.002
L 775111A	.	<0.002	.	.	.	<0.01	<0.002
L 775111B	.	<0.002	.	.	.	<0.01	<0.002
R 776111A	.	0.0045	.	.	.	<0.01	<0.002
L 776111B	.	<0.002	.	.	.	<0.01	<0.002
L 711108A	.	<0.002	.	.	<0.30	<0.01	0.039
L 711108B	.	<0.002	.	.	<0.30	<0.01	0.038
L 711109A	.	<0.002	.	.	<0.30	0.012	<0.002
R 711109B	.	<0.002	.	.	<0.30	<0.01	0.049
L 711110A	.	<0.002	.	.	<0.30	<0.01	0.029
L 711110B	.	<0.002	.	.	<0.30	<0.01	0.053
L 711111A	.	<0.002	.	.	<0.30	<0.01	0.067
L 711111B	.	.	.	.	.	.	.

J.8 Laboratory Control Column (Media Only) Leachate Studies

In lieu of constructing a complete set of control (media only) cells in the field, a combination of field and laboratory controls was used. The field investigation included two full-size control field cells (see Appendix E). A full set of control columns with all six disposal media was also operated in the laboratory. The codes which indicate the contents of each of the lab control columns are as follows:

A = Sandstone
B = Shale
C = Alluvium
D = Interburden
E = Limestone
F = Glacial till

The format of data presentation for the lab columns is markedly different from the preceding sections. Rather than depicting the data as a rectangular array with each record identified by sample and containing the analytical parameters for that sample, the data file was expanded, transposed, and sorted by chemical parameter so that all sample dates for all columns for a particular element could be presented on a single page. Thus, the first page of data lists aluminum concentrations for all sample dates (moving down the page) and for all of the laboratory columns (moving across the page). The following pages list barium, then boron, and so forth through the rest of the analytical parameters.

A period (.) indicates a missing value, and blank means that no sample was taken from that column for that date. Note that a variable called 'day' is included; it serves to record the number of days elapsed since the first day of the columnar experiment.

PARAMETER= ALUMINUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	0.59	0.57			0.75	
27SEP79	2				<0.06	0.41	
28SEP79	3	0.17	1.1			0.32	
01OCT79	6	0.34	0.39		<0.06		0.23
02OCT79	7					0.11	<0.06
04OCT79	9				<0.06	0.085	
09OCT79	14	1.4	4.7	1.6			
10OCT79	15						
16OCT79	31					0.4	0.27
25OCT79	30	2	4.4	2.6	2400		
26OCT79	31					3.7	
29OCT79	34			2.3			
06NOV79	42	2.5	5		1900		
15NOV79	51			2.5		3.1	3
19NOV79	55	2.8	4.8		1900		
27NOV79	63			2.5	1900	2.8	
29NOV79	65	2.8	4.9	2.3			3
05DEC79	71			2.4	1800	2.8	
12DEC79	78	3.2	5.4				
02JAN80	99				1700	3	3
03JAN80	100			3			3.3
15JAN80	112	1.6	5	•			•
21JAN80	118				1800	3.5	
28JAN80	125	2.2					3.2
01FEB80	129		5.6	2.9	1700	3.5	
08FEB80	136	2.6					
19FEB80	147		5.6	2.9	1500	3.5	3.2
03MAR80	160						
10MAR80	167	3.3	5.9	2.8	1500		3.2
27MAR80	184		4.5	0.52		3.4	
03APR80	191			0.54			0.76
15APR80	203		4.8		2100	1.3	
23APR80	211			0.58			
07MAY80	225						0.93
15MAY80	233	2.6			2100		

PARAMETER= ALUMINUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		4.4				
23MAY80	241						
29MAY80	247	2.8	4.7				0.76
02JUN80	251				1100	1.1	
09JUN80	258	3		0.24			
10JUN80	259						
16JUN80	265		4.1	0.36		0.78	0.63
01JUL80	280						
16JUL80	295				1000		0.63
21JUL80	300	2.6				0.98	
22JUL80	301				1000		0.78
24JUL80	303	2.3				0.89	
25JUL80	304			0.4			
29JUL80	308		4	0.4	560	0.8	
27AUG80	337						
06SEP80	347	2.4		0.16			
08SEP80	349		4.3		680	0.91	
07OCT80	378	2.4	3.6	2.6	670	0.75	
10OCT80	381						
18OCT80	389		3.4		230		
30OCT80	401	1.9					
10NOV80	412						
21NOV80	423						<0.25
16JAN81	479			0.087		0.75	
21JAN81	484	2.6			960		
23JAN81	486		3.9				
23FEB81	517	2.5	3.4	<0.25	800	0.54	0.73

PARAMETER= BARIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	0.26	0.29			0.21	
27SEP79	2				0.16	0.21	
28SEP79	3	0.2	0.22			0.17	
01OCT79	6	0.19	0.18		0.15		0.32
02OCT79	7					0.18	0.25
04OCT79	9				0.14	0.18	
09OCT79	14	<.0018	0.19	0.3			
10OCT79	15						
16OCT79	21					0.18	0.24
25OCT79	30	0.44	<.0018	0.67	0.31		
26OCT79	31					0.93	
29OCT79	34			0.56			
06NOV79	42	0.43	0.54		0.38		
15NOV79	51			0.71		0.95	0.87
19NOV79	55	0.54	0.48		0.2		
27NOV79	63			0.6	0.32	0.86	
29NOV79	65	0.47	<.0018				0.91
05DEC79	71			0.76	0.58	0.83	
12DEC79	78	0.6	0.58	0.68			
02JAN80	99				0.57	0.86	0.66
03JAN80	100			0.087			0.13
15JAN80	122	0.05	0.0066	•			•
21JAN80	118				0.076	0.13	
28JAN80	125	0.0036					0.11
01FEB80	129		<.0006	0.11	<.0006	0.037	
08FEB80	186	<.0006					
19FEB80	147		670E-6	0.11	<.0006	0.12	0.051
03MAR80	160			0.0057	0.068		
10MAR80	167	0.017	0.042	0.27			0.15
27MAR80	184		0.18	0.27		0.098	
03APR80	191						0.21
15APR80	203		0.12	0.26	0.03	0.24	
23APR80	211						
07MAY80	225						0.22
15MAY80	233	0.13			0.057		

PARAMETER= BARIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234						
23MAY80	241		0.16				
29MAY80	247	0.21	0.21				
02JUN80	251				0.087	0.27	0.32
09JUN80	258	0.24		0.26			
10JUN80	259						
16JUN80	265					0.32	
01JUL80	280		0.078	0.027			0.36
16JUL80	295				0.11		
21JUL80	300	0.02				0.37	0.36
22JUL80	301				0.15		
24JUL80	303	0.049				0.33	0.43
25JUL80	304			0.026			
29JUL80	308			0.017	0.14	0.28	
27AUG80	337		0.08				
06SEP80	347	0.013		0.045			
08SEP80	349				<0.082	0.033	
07OCT80	378	0.006	0.012				
10OCT80	381		<0.082	0.033	<0.082	0.02	
18OCT80	389						
30OCT80	401	<0.082	0.006		<0.082		
10NOV80	412						
21NOV80	423						
16JAN81	479			0.043		0.034	0.038
21JAN81	484	0.024			0.087		
23JAN81	486		0.013				
23FEB81	517	0.01	0.009	0.039	<0.085	0.056	0.037

PARAMETER= BORON

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	0.067	0.3			0.6	
27SEP79	2				19	0.6	
28SEP79	3	<0.004	0.26			0.59	
01OCT79	6	<0.004	0.19		18		<0.004
02OCT79	7					0.62	<0.004
04OCT79	9				21	0.66	
09OCT79	14	0.085	1.9	<0.004			
10OCT79	15						
16OCT79	21					0.79	<0.004
25OCT79	30	1.6	3.3	1.7	11		
26OCT79	31					3.7	
29OCT79	34			1.3			
06NOV79	42	1.7	2		13		
15NOV79	51			1.8		3.5	2.1
19NOV79	55	2.1	1.3		13		
27NOV79	63			1.4	10	2.9	
29NOV79	65	1.9	<.0369				2.1
05DEC79	71			1.8	9.8	2.6	
12DEC79	78	2.4	2.1	1.6			
02JAN80	99				10	2.7	
03JAN80	100			1.6			1.4
15JAN80	112	0.61	1.7	•			1.8
21JAN80	118				9.4	2.6	•
28JAN80	125	0.82					
01FEB80	129		1.9	1.7	9.6	2.5	1.8
08FEB80	136	0.9					
19FEB80	147		2.1	1.8	9.2	2.6	1.7
03MAR80	160						
10MAR80	167	1.3	2.3	1.6	9.5		
27MAR80	184		0.37	0.87		2.5	1.8
03APR80	191			0.067			
15APR80	203		0.38	0.19	1.3	1.4	<0.027
23APR80	211						
07MAY80	225						
15MAY80	233	<0.027			1.5		0.62

PARAMETER= BORON

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		0.32				
23MAY80	241						
29MAY80	247	<0.027	<0.027		0.27	1.6	<0.027
02JUN80	251			0.51			
09JUN80	258	0.037					
10JUN80	259					0.78	
16JUN80	265		<0.027	<0.027			0.38
01JUL80	280				1.3		
16JUL80	295					1.1	0.38
21JUL80	300	<0.027			1.3		
23JUL80	301					1.4	0.37
24JUL80	303	<0.027		<0.027			
25JUL80	304			<0.027	1.6	1.2	
29JUL80	308		<0.027				
27AUG80	337			0.08			
06SEP80	347	<0.027			1.8	0.51	
08SEP80	349		<0.027				
07OCT80	378	<0.027	<0.027	<0.027	1.8	0.26	
10OCT80	381						
18OCT80	389		<0.027		1.2		
30OCT80	401	<0.027					
10NOV80	412						
21NOV80	423			<0.01		0.48	<0.05
16JAN81	479				4.3		
21JAN81	484	0.75					
23JAN81	486		1.1				
23FEB81	517	0.076	0.75	0.095	3.9	<0.05	2.4

PARAMETER= CADMIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	<0.005	<0.005			<0.005	
27SEP79	2				1.1	<0.005	
28SEP79	3	<0.005	<0.005			<0.005	
01OCT79	6	<0.005	<0.005		1.1		<0.005
02OCT79	7					<0.005	<0.005
04OCT79	9				1.2	<0.005	
09OCT79	14	<0.024	0.039	<0.005			
10OCT79	15						
16OCT79	21					<0.005	<0.005
25OCT79	30	<0.024	<0.024	<0.024	2.7		
26OCT79	31					0.29	
29OCT79	34			<0.024			
06NOV79	42	<0.024	<0.024	<0.024	3		
15NOV79	51					<0.024	<0.024
19NOV79	55	<0.024	<0.024	<0.024	2.9		
27NOV79	63				1.9	<0.024	
29NOV79	65	<0.024	<0.024	<0.024			<0.024
05DEC79	71			<0.024	1.8	<0.024	
12DEC79	78	<0.024	<0.024				<0.024
02JAN80	99			<0.008	1.8	<0.024	<0.008
03JAN80	108			•			•
15JAN80	112	<0.008	<0.008		1.9	<0.008	
21JAN80	118						<0.008
28JAN80	125	<0.008		<0.008	1.8	<0.008	
01FEB80	129		<0.008				
08FEB80	136	<0.008		<0.008	1.5	<0.008	<0.008
19FEB80	147		<0.008				
03MAR80	160			<0.008	1.6		<0.008
10MAR80	167	<0.008	<0.008	<0.025		<0.008	
27MAR80	184		<0.025	<0.025			<0.025
03APR80	191				1.8	<0.025	
15APR80	203		<0.025	<0.025			
23APR80	211						<0.025
07MAY80	225				1.8		
15MAY80	233	<0.025					

PARAMETER= CADMIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		<0.025				
23MAY80	241						<0.025
29MAY80	247	<0.025	<0.025		0.94	<0.025	
02JUN80	251			<0.025			
09JUN80	258	<0.025					
10JUN80	259					<0.025	<0.025
16JUN80	265		<0.025	<0.025			
01JUL80	280				0.65		<0.025
16JUL80	295					<0.025	
21JUL80	300	<0.025			0.97		<0.025
22JUL80	301					<0.025	
24JUL80	303	<0.025		<0.025			
25JUL80	304			<0.025	0.52	<0.025	
29JUL80	308		<0.025				
27AUG80	337			<0.025			
06SEP80	347	<0.025			0.51	<0.025	
08SEP80	349		<0.025				
07OCT80	378	<0.025	<0.025	<0.025	0.051	<0.025	
10OCT80	381				•		
18OCT80	389		<0.025		0.18		
30OCT80	401	<0.025					
10NOV80	412						<0.04
21NOV80	423			<0.008		<0.025	
16JAN81	479				0.28		
21JAN81	484	<0.04					
23JAN81	486		<0.04				
23FEB81	517	<0.04	<0.04	<0.04	0.27	<0.04	<0.04

PARAMETER= CALCIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	830	1200		400	330	
27SEP79	2					330	
28SEP79	3	790	1000		420	300	
01OCT79	6	760	850				220
02OCT79	7					250	220
04OCT79	9				400	230	
09OCT79	14	810	560	28			
10OCT79	15						
16OCT79	21			22	520	220	230
25OCT79	30	730	880			310	
26OCT79	31			22			
29OCT79	34				520		
06NOV79	42	810	830	18		230	320
15NOV79	51				490		
19NOV79	55	830	850	17	530	210	
27NOV79	63						320
29NOV79	65	860	810	21	570	180	
05DEC79	71			19			
12DEC79	78	820	770		560	170	290
02JAN80	99			14			250
03JAN80	100			•			•
15JAN80	112	740	660		560	190	
21JAN80	118						210
28JAN80	125	750		15	530	230	
01FEB80	129		680				
08FEB80	136	770		13	530	210	230
19FEB80	147		670				
03MAR80	160			12	570		220
10MAR80	167	750	620	12		210	
27MAR80	184		540	11			130
03APR80	191				540	160	
15APR80	203		510	11			
23APR80	211						96
07MAY80	225				510		
15MAY80	233	670					

PARAMETER= CALCIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		500				
23MAY80	241						110
29MAY80	247	660	580		510	120	
02JUN80	251			8.7			
09JUN80	258	680					
10JUN80	259					100	86
16JUN80	285		510	8.8			
01JUL80	280				500		86
16JUL80	295					120	
21JUL80	300	730			500		170
22JUL80	301					120	
24JUL80	303	700		7.9			
25JUL80	304			7.9	520	99	
29JUL80	308		530				
27AUG80	337			7.8			
06SEP80	347	640			570	96	
08SEP80	349		580				
07OCT80	378	630	580	12	510	73	
100CT80	381						
180CT80	389		590		570		
300CT80	401	570					
10NOV80	412						99
21NOV80	423			6.9		64	
16JAN81	479				570		
21JAN81	484	670					
23JAN81	486		600				
23FEB81	517	630	630	7.5	570	130	72

PARAMETER= CHLORIDES

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0					•	
26SEP79	1	•	•		•	•	
27SEP79	2					•	
28SEP79	3	•	•		•		
01OCT79	6	•	•				•
02OCT79	7					•	•
04OCT79	9				•	•	
09OCT79	14	•	•	•			
10OCT79	15						
16OCT79	31					•	•
25OCT79	30	•	•	•	•		
26OCT79	31					•	
29OCT79	34			•			
06NOV79	42	•	•	•	•		
15NOV79	51					•	•
19NOV79	55	•	•	•	•		
27NOV79	63					•	
29NOV79	65	•	•	•	•		•
05DEC79	71			•		•	
12DEC79	78	•	•		•		
02JAN80	99			•		•	•
03JAN80	100			•			•
15JAN80	112	•	•	•	•	•	•
21JAN80	118						
28JAN80	125	•		•	•	•	•
01FEB80	129		•				
08FEB80	136	•		•	•	•	
19FEB80	147		•				•
03MAR80	160			•	•		
10MAR80	167	•	•	•		•	•
27MAR80	184		•	<2			4.6
03APR80	191				•	3.1	
15APR80	203		•	<2			
23APR80	211						4.2
07MAY80	225				20		
15MAY80	233	2					

PARAMETER= CHLORIDES

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		<2				
23MAY80	241						
29MAY80	247	3	•				•
02JUN80	251			•	•	•	
09JUN80	258	3					
10JUN80	259						
16JUN80	285		3.3	<2		•	•
01JUL80	280				12		6.4
16JUL80	295					<2	
21JUL80	300	2.8			12		6.7
22JUL80	301					<2	
24JUL80	303	3.7		<2			
25JUL80	304			<2	6.5	<2	
29JUL80	308		2				
27AUG80	337			<2			
06SEP80	347	2.5			6.2	<2	
08SEP80	349		2				
07OCT80	378	2.7	2	<2	5.8	<2	
10OCT80	381				5.4		
18OCT80	389		2		•		
30OCT80	401	<2					
10NOV80	412						
21NOV80	423			<2		2.5	2.7
16JAN81	479				3.8		
21JAN81	484	2.2					
23JAN81	486		2.9				
23FEB81	517	2.4	2.7	<2	•	<2	2.1

PARAMETER= CHROMIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	0.058	0.17		4.7	0.039	
27SEP79	2					0.041	
28SEP79	3	0.058	0.16			0.037	
01OCT79	6	0.086	0.14		4.1		0.016
02OCT79	7					0.025	0.015
04OCT79	9				4.4	0.022	
09OCT79	14	0.068	0.4	<0.005			
10OCT79	15						
16OCT79	21					0.025	0.016
25OCT79	30	0.12	0.18	0.32	6.3		
26OCT79	31			0.31		0.29	
29OCT79	34				7.2		
06NOV79	42	0.17	0.25	0.3		0.29	0.3
15NOV79	51				7		
19NOV79	55	0.19	0.23	0.31	4.9	0.28	
27NOV79	63						0.32
29NOV79	65	0.22	0.33	0.3	4.8	0.29	
05DEC79	71			0.3			
12DEC79	78	0.23	0.38		4.8	0.29	0.32
02JAN80	99			0.42			0.39
03JAN80	100			•			•
15JAN80	112	0.046	0.37		<0.007	0.4	
21JAN80	118						0.39
28JAN80	125	0.16		0.41	<0.007	0.4	
01FEB80	129		0.46				
08FEB80	136	0.19		0.4	<0.007	0.4	0.39
19FEB80	147		0.46				
03MAR80	160			0.4	<0.007		0.4
18MAR80	187	0.29	0.5	0.089		0.41	
27MAR80	184		<0.006	<0.006			<0.006
03APR80	191				1.4	<0.006	
15APR80	203		<0.006	<0.006			
23APR80	211						<0.006
07MAY80	225				1.2		
15MAY80	233	0.056					

PARAMETER= CHROMIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		<0.006				
23MAY80	241						
29MAY80	247	<0.006	<0.006				<0.006
02JUN80	251				1.6	<0.006	
09JUN80	258	0.082		<0.003			
10JUN80	259						
16JUN80	265		0.048	<0.003		0.006	<0.003
01JUL80	280						
16JUL80	295				1.3		<0.003
21JUL80	300	0.053				0.008	
22JUL80	301				1.6		<0.003
28JUL80	307	0.056				<0.003	
25JUL80	304			<0.003			
29JUL80	308			<0.003	1.2	0.004	
27AUG80	337		0.048				
06SEP80	347	0.039		0.005			
08SEP80	349				1.2	0.015	
07OCT80	378	0.041	0.037				
10OCT80	381		0.047	0.011	0.65	0.016	
18OCT80	389				•		
30OCT80	401	<0.05	0.048		0.26		
10NOV80	412						
21NOV80	423			0.017			0.021
16JAN81	479					0.015	
21JAN82	484	0.05			0.78		
23JAN81	486		0.061				
23FEB81	517	<0.005	0.036	<0.005	0.65	<0.005	0.017

PARAMETER= COBALT

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0					<0.15	
26SEP79	1	<0.15	0.53		41	<0.15	
27SEP79	2					<0.15	
28SEP79	3	0.17	0.63		35		<0.15
01OCT79	6	0.17	0.58			<0.15	<0.15
02OCT79	7				36	<0.15	
04OCT79	9			<0.15			
09OCT79	14	<.0348	0.36				
10OCT79	15					<0.15	<0.15
16OCT79	21			0.13	36		
25OCT79	30	0.046	0.25			0.091	
26OCT79	31			0.11			
29OCT79	34				39		
06NOV79	42	0.079	0.32	0.1		0.091	0.082
15NOV79	51				36		
19NOV79	55	0.099	0.32	0.11	24	0.079	
27NOV79	63						0.1
29NOV79	65	0.1	0.29	0.1	22	0.078	
05DEC79	71			0.11			
12DEC79	78	0.11	0.42		22	0.085	0.11
02JAN80	99			0.28			0.24
03JAN80	100			*			*
15JAN80	112	<.0116	0.45		23	0.25	
21JAN80	118						0.25
28JAN80	125	0.066		0.26	28	0.25	
01FEB80	129		0.51				
08FEB80	136	0.1		0.27	17	0.25	0.26
19FEB80	147		0.5				
03MAR80	160			0.26	17		0.24
10MAR80	167	0.16	0.52	<0.018		0.25	
27MAR80	184		0.19	<0.018			<0.018
03APR80	191				16	<0.018	
15APR80	203		0.19	<0.018			
23APR80	211						<0.018
07MAY80	225				15		
15MAY80	233	<0.018					

PARAMETER= COBALT

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		0.19				
23MAY80	241						
29MAY80	247	<0.018	0.19				<0.018
02JUN80	251				7.9	<0.018	
09JUN80	258	<0.018		<0.018			
10JUN80	259						
16JUN80	265		0.15	<0.018		<0.018	<0.018
01JUL80	280				7		
16JUL80	295						<0.018
21JUL80	300	<0.018				<0.018	
22JUL80	301				6.8		<0.018
24JUL80	303	<0.018				<0.018	
25JUL80	304			<0.018			
29JUL80	308			<0.018	3.9	<0.018	
27AUG80	337		0.13				
06SEP80	347	<0.018		<0.018			
08SEP80	349				4.7	<0.018	
07OCT80	378	<0.018	0.14				
10OCT80	381		0.093	0.03	4.8	<0.018	
18OCT80	389				•		
30OCT80	401	<0.018	0.08		1.8		
10NOV80	412						
21NOV80	423						
16JAN81	479			<0.011			<0.03
21JAN81	484	<0.03			3.8	<0.018	
23JAN81	486		0.053				
23FEB81	517	<0.03	0.096	<0.03	3.4	<0.03	<0.03

PARAMETER= CONDUCTIVITY

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	4200	11000			6900	
27SEP79	2				18000	7000	
28SEP79	3	3800	9000			6400	
01OCT79	6	3800	7200		18000		1400
02OCT79	7					5500	1300
04OCT79	9				18000	5100	
09OCT79	14	3400	6000	240			
10OCT79	15						
16OCT79	21					4700	1400
25OCT79	30	2900	5400	140	18000		
26OCT79	31					4100	
29OCT79	34			140			
06NOV79	42	2800	5100		25000		
15NOV79	51			128		3400	1400
19NOV79	55	3000	5100		30000		
27NOV79	63			120	18000	2300	
29NOV79	65	2800	4800				1300
05DEC79	71			130	14000	2100	
12DEC79	78	2800	4200	120			
02JAN80	99				16000	2000	1200
03JAN80	100			.			.
15JAN80	112	2600	3700	110			1200
21JAN80	118				15000	2100	
28JAN80	125	3600					950
01FEB80	129		3400	110	15000	1900	
08FEB80	136	2800					
19FEB80	147		3400	98	15000	1700	920
03MAR80	160						
10MAR80	167	2700	3400	94	14000		960
27MAR80	184		3600	94		1700	
03APR80	191			93			
15APR80	203		3200		15000	1700	860
23APR80	211			80			
07MAY80	225						810
15MAY80	233	2800			15000		

PARAMETER= CONDUCTIVITY

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		3500				
23MAY80	241						840
29MAY80	247	2400	2900		12000	1200	
02JUN80	251			80			
09JUN80	258	3200					
10JUN80	259					1100	730
16JUN80	265		3700	80			
01JUL80	280				12000		780
16JUL80	295					1200	
21JUL80	300	3100			13000		950
22JUL80	301					1000	
24JUL80	303	2800		150			
25JUL80	304			240	8600	970	
29JUL80	308		3700				
27AUG80	337			86			
06SEP80	347	2800			9800	880	
08SEP80	349		3600				
07OCT80	378	2900	3500	250	7400	1400	
10OCT80	381				5900		
16OCT80	389		3300		•		
30OCT80	401	2700					
10NOV80	412						660
21NOV80	423			75		630	
16JAN81	479				9100		
21JAN81	484	3100					
23JAN81	486		3400				
23FEB81	517	3200	3400	80	•	850	740

PARAMETER= COPPER

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	<0.005	<0.005			<0.005	
27SEP79	2				56	<0.005	
28SEP79	3	<0.005	<0.005			<0.005	
01OCT79	6	<0.005	<0.005		48		<0.005
02OCT79	7					<0.005	<0.005
04OCT79	9				52	<0.005	
09OCT79	14	0.027	0.26	<0.005			
10OCT79	15					<0.005	<0.005
16OCT79	21			0.22	52		
25OCT79	30	0.062	0.089			0.19	
26OCT79	31			0.2			
29OCT79	34				57		
06NOV79	42	0.097	0.11	0.2		0.18	0.18
15NOV79	51				56		
19NOV79	55	0.12	0.087	0.21	42	0.17	
27NOV79	63						0.2
29NOV79	65	0.15	0.17	0.2	40	0.18	
05DEC79	71			0.19			
12DEC79	78	0.16	0.21		48	0.18	0.2
02JAN80	99			0.37			0.33
03JAN80	100				36	0.35	
15JAN80	112	0.015	0.27				0.33
21JAN80	118			0.37	33	0.34	
28JAN80	125	0.11					0.34
01FEB80	129		0.36	0.36	27	0.34	
08FEB80	136	0.15					0.34
19FEB80	147		0.35	0.35	27		
03MAR80	160			0.018		0.35	0.012
10MAR80	167	0.23	0.39	0.018	34	<0.003	
27MAR80	184		0.043				<0.003
03APR80	191			0.018			
15APR80	203		0.074	<0.003	32		
23APR80	211						
07MAY80	225						
15MAY80	233	0.031					

PARAMETER= COPPER

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		0.022				
23MAY80	241						<0.003
29MAY80	247	<0.003	0.068		17	<0.003	
02JUN80	251			<0.003			
09JUN80	258	<0.003					
10JUN80	259					0.008	0.013
16JUN80	285		0.05	0.019			
01JUL80	280				16		0.013
16JUL80	295					<0.003	
21JUL80	308	<0.003			16		<0.003
22JUL80	301					<0.003	
29JUL80	303	0.039		0.089			
25JUL80	304			<0.003	9.8	<0.003	
29JUL80	308		0.059				
27AUG80	337			<0.003			
06SEP80	347	<0.003			11	<0.003	
08SEP80	349		0.051				
07OCT80	378	<0.003	0.05	0.047	11	<0.003	
10OCT80	381						
18OCT80	389		0.049		4.9		
30OCT80	401	<0.003					
10NOV80	412						<0.005
21NOV80	423			0.044		<0.003	
16JAN81	479				9.7		
21JAN81	484	0.018					
23JAN81	486		<0.005				
23FEB81	517	<0.005	<0.005	<0.005	8.6	<0.005	0.023

PARAMETER= FLUORIDES

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	0.93	0.55		6.4	1.4	
27SEP79	2					1.8	
28SEP79	3	0.45	0.42			2.1	
01OCT79	6	0.42	0.48		11		0.72
02OCT79	7					1.9	0.57
04OCT79	9				9.5	1.8	
09OCT79	14	0.31	0.29	0.15			
10OCT79	15						
16OCT79	21					1.9	0.46
25OCT79	30	0.18	0.25	0.1	15		
26OCT79	31					1.7	
29OCT79	34			0.096			
06NOV79	42	0.13	0.25		8.4		
15NOV79	51			0.089		1.6	0.38
19NOV79	55	0.19	0.3		9.2		
27NOV79	63			0.1	0.96	1.7	
29NOV79	65	<0.05	0.16				0.41
05DEC79	71			0.06	4.6	1.7	
12DEC79	78	<0.05	0.1	0.05			
02JAN80	99				5.9	1.7	0.4
03JAN80	100			•			•
15JAN80	112	0.06	0.11	<0.05			0.41
21JAN80	118				5.2	1.5	
28JAN80	125	0.19		0.13			0.46
01FEB80	129		0.07		4.3	1.4	
08FEB80	136	0.16		0.06			
19FEB80	147		0.11		4.3	1.5	0.43
03MAR80	160			0.05	5.9		
10MAR80	167	<0.05	0.19				0.41
27MAR80	184		0.1	•		1.6	
03APR80	191			0.08			0.33
15APR80	203		0.12		6.8	1.5	
23APR80	211			0.07			
07MAY80	225						0.34
15MAY80	233	0.15			7.4		

PARAMETER= FLUORIDES

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		0.34				
23MAY80	241						
29MAY80	247	0.1	0.21		4.3	1.5	0.39
02JUN80	251			0.1			
09JUN80	258	0.2					
10JUN80	259					1.5	
16JUN80	265		0.1	0.1			0.36
01JUL80	280				3.8		0.46
16JUL80	295					1.5	
21JUL80	300	0.1			4.3		0.46
22JUL80	301					1.6	
24JUL80	303	0.06		<0.05			
25JUL80	304			0.07	2.3	1.4	
29JUL80	308		0.13				
27AUG80	337			0.05			
06SEP80	347	<0.05			4	1.6	
08SEP80	349		0.19				
07OCT80	378	<0.05	0.29	0.05	1	1.7	
10OCT80	381				1.3		
18OCT80	389		<0.05				
30OCT80	401	<0.05			•		
10NOV80	412						
21NOV80	423			0.07			0.57
16JAN81	479					1.6	
21JAN81	484	0.09			2.9		
23JAN81	486		0.18				
23FEB81	517	0.11	0.1	0.08	•	1.6	0.37

PARAMETER= IRON

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	1.7	0.76		<0.004	2.8	
27SEP79	2					1.1	
28SEP79	3	0.3	3		<0.004	0.92	
01OCT79	6	0.9	0.44				0.86
02OCT79	7				<0.004	0.26	0.095
04OCT79	9			7.6		0.24	
09OCT79	14	0.38	0.11				
10OCT79	15					1.5	2.6
16OCT79	21			5.1	8000		
25OCT79	30	0.29	0.036			8.7	
26OCT79	31			2.1			
29OCT79	34				7800		
06NOV79	42	0.61	0.032	0.8		0.66	1.6
15NOV79	51				7900		
19NOV79	55	0.096	0.07	0.37	8100	0.46	
27NOV79	63						3.3
29NOV79	65	0.15	0.022	3.9	8200	0.27	
05DEC79	71			6.4			
12DEC79	78	0.066	0.19		8100	0.25	1.8
02JAN80	99			0.43			0.63
03JAN80	100			•			•
16JAN80	112	0.028	0.18		7300	0.2	
21JAN80	118						1.1
28JAN80	125	0.07		0.22	7300	0.18	
01FEB80	129		0.21				
08FEB80	136	0.081		0.2	6700	0.18	0.25
19FEB80	147		0.19				
03MAR80	160			0.19	7800		0.69
10MAR80	167	0.12	0.26	0.048		0.18	
27MAR80	184		0.32	0.048			0.13
03APR80	191				4000	3	
15APR80	203		0.65	0.21			
23APR80	211						1
07MAY80	225				4000		
15MAY80	233	2.6					

PARAMETER= IRON

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		0.46				
23MAY80	241						
29MAY80	247	13	0.58				0.89
02JUN80	251				3900	1.8	
09JUN80	258	0.19		30			
10JUN80	259						
16JUN80	265		0.26	<0.023		0.84	0.59
01JUL80	280						
16JUL80	295				3800		0.59
21JUL80	300	0.2				0.26	
22JUL80	301				3800		7.7
24JUL80	303	0.34				0.15	
25JUL80	304			0.034			
29JUL80	308		0.21	0.023	2080	0.16	
27AUG80	337						
06SEP80	347	0.31		<0.023			
08SEP80	349		0.3		420	0.33	
07OCT80	378	0.1	0.067	2.1	420	0.098	
10OCT80	381						
18OCT80	389		0.39		*		
30OCT80	401	0.15			400		
10NOV80	412						
21NOV80	423			0.15		0.089	<0.04
16JAN81	479				1880		
31JAN81	484	0.56					
23JAN81	486		1.4				
23FEB81	517	<0.04	1.1	<0.04	1600	1.4	0.26

PARAMETER= LITHIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0					•	
26SEP79	1	•	•		•	•	
27SEP79	2					•	
28SEP79	3	•	•		•		•
01OCT79	6	•	•			•	•
02OCT79	7				•	•	
04OCT79	9			•			
09OCT79	14	•	•				
10OCT79	15					•	•
16OCT79	21			•	•		
25OCT79	30	•	•			•	
26OCT79	31			•			
29OCT79	34				•		
06NOV79	42	•	•	•		•	•
15NOV79	51				•		
19NOV79	55	•	•	•	•	•	
27NOV79	63						•
29NOV79	65	•	•	•	•	•	
05DEC79	71			•			
12DEC79	78	•	•		•	•	•
02JAN80	99			•			•
03JAN80	100			•			•
15JAN80	112	•	•		•	•	
21JAN80	118						•
28JAN80	125	•		•	•	•	
01FEB80	129		•				
08FEB80	136	•		•	•	•	•
19FEB80	147		•				
03MAR80	160			•	•		•
10MAR80	167	•	•	0.017		•	
27MAR80	184		0.41	0.017			0.004
03APR80	191				18	0.28	
15APR80	203		0.45	<0.001			
23APR80	211						<0.001
07MAY80	225				11		
15MAY80	233	0.017					

PARAMETER= LITHIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234						
23MAY80	241		0.39				
29MAY80	247	0.048					
02JUN80	251		0.45		6.7	0.18	<0.001
09JUN80	258	0.061		<0.001			
10JUN80	259						
16JUN80	265		0.38	0.003		0.15	<0.001
01JUL80	280						
16JUL80	295				6.1		<0.001
21JUL80	300	<0.001				0.17	
22JUL80	301				6.5		<0.001
24JUL80	303	<0.001				0.15	
25JUL80	304			<0.001			
29JUL80	308			<0.001	3.9	0.13	
27AUG80	337		0.34				
06SEP80	347	<0.001		<0.001			
08SEP80	349				5	0.11	
07OCT80	378	<0.001	0.35				
10OCT80	381		0.24	0.003	49	0.077	
18OCT80	389						
30OCT80	401	<0.001	0.2		1.9		
10NOV80	412						
21NOV80	423						
16JAN81	479			0.003		0.076	<0.002
21JAN81	484	<0.002			4.6		
23JAN81	486						
23FEB81	517	<0.002	0.23				
			0.23	<0.002	4.3	0.07	0.02

PARAMETER= MAGNESIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	81	<0.001			73	
27SEP79	2				<0.001	74	
28SEP79	3	81	<0.001			72	
01OCT79	6	81	7		<0.001		47
02OCT79	7					65	50
04OCT79	9				<0.001	63	
09OCT79	14	180	400	5.2			
10OCT79	15						
16OCT79	21					62	52
25OCT79	30	180	700	6.3	2000		
26OCT79	31					110	
29OCT79	34			6.5			
06NOV79	42	200	630		2300		
16NOV79	51			5.6		88	88
19NOV79	55	190	620		2300		
27NOV79	63			5.5	1500	75	
29NOV79	65	190	600				85
05DEC79	71			5.8	1500	65	
12DEC79	78	200	510	5.9			
02JAN80	99				1500	65	
03JAN80	100			7.2			76
15JAN80	112	240	480	*			77
21JAN80	118				1500	83	*
28JAN80	125	220					70
01FEB80	129		500	6.6	1300	97	
08FEB80	136	220					
19FEB80	147		480	6.6	1200	87	70
03MAR80	160			6.1	1200		
10MAR80	167	230	470	3.2		88	69
27MAR80	184		420	3.2			
03APR80	191				1100	83	58
15APR80	203		440	2.8			
23APR80	211						62
07MAY80	225				1100		
15MAY80	233	220					

PARAMETER= MAGNESIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		430				
23MAY80	241						56
29MAY80	247	210	470		640	67	
02JUN80	251			1.7			
09JUN80	258	220					
10JUN80	259					52	50
16JUN80	285		400	1.7			
01JUL80	280				540		50
16JUL80	295					61	
21JUL80	300	220			540		52
22JUL80	301					60	
24JUL80	303	210		1.6			
25JUL80	304			1.5	300	50	
29JUL80	308		380				
27AUG80	337			1.6			
06SEP80	347	270			460	58	
08SEP80	349		470				
07OCT80	378	250	450	3.2	460	46	
10OCT80	381				•		
16OCT80	389		420		170		
30OCT80	401	240					
10NOV80	412						56
21NOV80	423			1.5		42	
16JAN81	479				410		
21JAN81	484	320					
23JAN81	486		430				
23FEB81	517	320	450	1.4	380	62	63

PARAMETER= MANGANESE

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	1.4	48		50	0.58	
27SEP79	2					0.44	
28SEP79	3	1.1	50			0.26	
01OCT79	6	1.1	38		44		0.38
02OCT79	7					0.24	0.13
04OCT79	9				49	0.58	
09OCT79	14	2.1	20	0.99			
10OCT79	15						
16OCT79	21			1.9	59	0.97	1.2
25OCT79	30	1.1	29			1.1	
26OCT79	31			1.9			
29OCT79	34				68		
06NOV79	42	1.5	28	1.3		0.71	2.2
15NOV79	51				66		
19NOV79	55	2	28	1.2	45	0.51	
27NOV79	63						3.5
29NOV79	65	2.4	24	1.4	43	0.51	
05DEC79	71			1.1			
12DEC79	78	1.6	25		44	0.12	3.1
02JAN80	99			0.84			2
03JAN80	100			•			•
15JAN80	112	0.82	21		44	0.12	
21JAN80	118						1
28JAN80	125	0.28		0.56	48	0.094	
01FEB80	129		22				
08FEB80	136	0.17		0.3	34	0.069	0.24
19FEB80	147		23				
03MAR80	160			0.19	34		0.27
10MAR80	167	0.13	21	0.15		0.069	
27MAR80	184		22	0.15			0.04
03APR80	191				38	0.088	
15APR80	203		21	0.1			
23APR80	211						0.009
07MAY80	225				36		
15MAY80	233	0.11					

PARAMETER= MANGANESE

SAMPLE DATE	DRY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		21				
23MAY80	241						
29MAY80	247	0.14	23				0.46
02JUN80	251			0.079	20	<0.003	
09JUN80	258	0.21					
10JUN80	259						
16JUN80	265		19	0.076		<0.003	0.29
01JUL80	280						
16JUL80	295				18		0.29
21JUL80	300	1.9				<0.003	
22JUL80	301				18		2.1
24JUL80	303	1.2				<0.003	
25JUL80	304			0.1			
29JUL80	308		18	0.11	9.5	<0.003	
27AUG80	327						
06SEP80	347	1.8		0.059			
08SEP80	349		18		12	0.004	
07OCT80	378	1.5	16	0.096			
20OCT80	381				12	0.004	
18OCT80	389		15		*		
30OCT80	401	1.5			4.5		
10NOV80	412						
21NOV80	423						<0.006
16JAN81	479			0.072		0.006	
21JAN81	484	0.11			9.6		
23JAN81	486		15				
23FEB81	517	<0.006	16	0.056	8.7	0.5	0.087

PARAMETER= MOLYBDENUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	0.11	0.31			1.3	
27SEP79	2				9.9	1.3	
28SEP79	3	0.13	0.29			1.3	
01OCT79	6	0.14	0.28		9.4		<0.04
02OCT79	7					1.1	<0.04
04OCT79	9				10	0.96	
09OCT79	14	0.081	0.19	<0.04			
10OCT79	15						
16OCT79	21					0.87	<0.04
25OCT79	30	0.084	0.11	0.18	1.6		
26OCT79	31					1.4	
29OCT79	34			0.17			
06NOV79	42	0.075	0.14		1.6		
15NOV79	51			0.16		1.3	0.21
19NOV79	55	0.091	0.12		1.6		
27NOV79	63			0.17	1.2	1.3	
29NOV79	65	0.1	0.19				0.2
05DEC79	71			0.16	1.1	1.1	
12DEC79	78	0.11	0.2	0.17			
02JAN80	99				1.1	1.1	0.19
03JAN80	100			0.27			0.31
15JAN80	112	0.097	0.23	•			•
21JAN80	118				1.2	1.1	
28JAN80	125	0.11					0.27
01FEB80	129		0.29	0.27	1.2	1.1	
08FEB80	136	0.12					
19FEB80	147		0.28	0.26	1.1	1.1	0.26
03MAR80	160			0.26	1.1		
10MAR80	167	0.18	0.31	0.021		1.1	0.26
27MAR80	184		0.057	0.021			0.017
03APR80	191				0.93	0.98	
15APR80	203		0.077	<0.086			
23APR80	211						0.016
07MAY80	225				0.94		
15MAY80	233	0.038					

PARAMETER= MOLYBDENUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		0.052				
23MAY80	241						0.025
29MAY80	247	0.056	0.072		0.51	1	
02JUN80	251			0.02			
09JUN80	258	0.085					
10JUN80	259					0.84	<0.009
16JUN80	265		0.063	<0.006			
01JUL80	280				0.46		<0.009
16JUL80	295					0.94	
21JUL80	300	0.037			0.46		<0.009
23JUL80	301					0.9	
28JUL80	303	0.036		<0.006			
25JUL80	304			<0.006	0.25	0.8	
29JUL80	308		0.054				
27AUG80	337			0.013			
06SEP80	347	0.028			0.34	0.86	
08SEP80	349		0.077				
07OCT80	378	0.025	0.034	0.02	0.035	0.68	
10OCT80	381						
18OCT80	389		0.028		0.11		
30OCT80	401	0.018					
19NOV80	412						0.21
21NOV80	423			<0.009		0.65	
16JAN81	479				0.36		
21JAN81	484	<0.01					
23JAN81	486		<0.01				
23FEB81	517	<0.01	0.041	<0.01	0.34	0.67	<0.01

PARAMETER= NICKEL

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0					0.12	
26SEP79	1	0.14	0.42		81	0.11	
27SEP79	2					0.1	
28SEP79	3	0.13	0.54		70		0.064
01OCT79	6	0.13	0.48			0.059	0.056
02OCT79	7				73	0.064	
04OCT79	9			0.091			
09OCT79	14	<0.051	<0.051				
10OCT79	15					0.073	0.079
16OCT79	21			<0.051	75		
25OCT79	30	<0.051	<0.051			<0.051	
26OCT79	31			<0.051			
29OCT79	34				79		
06NOV79	42	<0.051	<0.051	<0.051		<0.051	<0.051
15NOV79	51				75		
19NOV79	55	<0.051	<0.051	<0.051	44	<0.051	
27NOV79	63						<0.051
29NOV79	65	<0.051	<0.051	<0.051	42	<0.051	
05DEC79	71			<0.051			
12DEC79	78	<0.051	<0.051		43	<0.051	<0.051
02JAN80	99			<0.017			<0.017
03JAN80	100			•			•
15JAN80	112	<0.017	<0.017		41	<0.017	
21JAN80	118						<0.017
28JAN80	125	<0.017		<0.017	37	<0.017	
01FEB80	129		<0.017				
08FEB80	136	<0.017		<0.017	30	<0.017	<0.017
19FEB80	147		<0.017				
03MAR80	160			<0.017	29		<0.017
10MAR80	167	<0.017	<0.017	0.017		<0.017	
27MAR80	184		0.47	0.017			0.017
03APR80	191				39	0.041	
15APR80	203		0.49	<0.009			
23APR80	211						0.016
07MAY80	225				37		
15MAY80	233	0.078					

PARAMETER= NICKEL

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		0.41				
23MAY80	241						0.072
29MAY80	247	0.098	0.39		20	0.023	
02JUN80	251			0.022			
09JUN80	258	0.13					
10JUN80	259					<0.009	<0.009
16JUN80	265		0.34	<0.009			
01JUL80	280				17		<0.009
16JUL80	295					<0.009	
21JUL80	300	0.024			17		<0.009
22JUL80	301					<0.009	
28JUL80	303	0.035		<0.009			
25JUL80	304			<0.009	9.1	<0.009	
29JUL80	308		0.3				
27AUG80	337			0.028			
06SEP80	347	0.1			10	0.032	
08SEP80	349		0.32				
07OCT80	378	0.048	0.26	0.13	10	0.034	
10OCT80	381						
18OCT80	389		0.24		4.1		
30OCT80	401	0.04					
10NOV80	412						0.065
21NOV80	423			0.041		<0.034	
16JAN81	479				9.7		
21JAN81	484	<0.015					
23JAN81	486		0.16				
23FEB81	517	<0.015	0.078	<0.015	8.5	<0.015	<0.015

PARAMETER= PH

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	7.5	7.2			7.4	
27SEP79	2				1.9	7.7	
28SEP79	3	7.8	7.1			8	
01OCT79	6	7.6	7.6		1.9		7.3
02OCT79	7					8.4	8.3
04OCT79	9				1.9	8.4	
09OCT79	14	8	7.8	7.2			
10OCT79	15						
16OCT79	21					8.4	8
25OCT79	30	7.8	8	7.4	2		
26OCT79	31					8.5	
29OCT79	84			7.6			
06NOV79	42	7.7	7.7		2.1		
15NOV79	51			7.5		8.5	8
19NOV79	55	7.3	6.8		2.4		
27NOV79	83			6.4	2	7.9	
29NOV79	85	7.3	7.3	7.4			7.8
05DEC79	71			6.8	2.2	8.2	
12DEC79	78	7.4	7.3				
02JAN80	99				2.2	8.3	7.8
03JAN80	108			.			.
15JAN80	112	7.6	7.4	7.4			7.6
21JAN80	118				2	7.9	
28JAN80	125	7.6					8.1
01FEB80	129		7.6	6.8	1.9	8.1	
08FEB80	136	7.3					
19FEB80	147		7.3	7	2	7.8	7.8
03MAR80	160						
10MAR80	167	7.7	7.7	7.5	1.9		7.9
27MAR80	184		7.6	7.5		8.1	
03APR80	191			6.8			7.9
15APR80	203		8	8.2	1.9	8.2	
28APR80	211						
07MAY80	225						8.3
15MAY80	233	7.7			1.9		

PARAMETER= PH

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
18 MAY80	234		7.6				
25 MAY80	241						
29 MAY80	247	7.4	7.6		1.9		8.2
02 JUN80	251			8.2		8.2	
09 JUN80	258	7.4					
10 JUN80	259						
16 JUN80	265		7.9	7.1		8.3	8.4
01 JUL80	280				2		
16 JUL80	295						8.3
21 JUL80	300	7.8				8.2	
22 JUL80	301				2		
23 JUL80	303	7.6				7.8	8.2
25 JUL80	304			7.6			
29 JUL80	308			7.5	2	8.4	
27 AUG80	337		7.6				
06 SEP80	347	7.7		6.7			
08 SEP80	349		7.5		2	8.4	
07 OCT80	378	7.7	7.1	3.5			
00 OCT80	381				2.1	8.3	
18 OCT80	389		7.9		2.1		
30 OCT80	401	7.6			•		
10 NOV80	412						
21 NOV80	423			6.5			7.9
16 JAN81	479					8.3	
31 JAN81	484	7.8			2.1		
03 JAN81	486		7.6				
23 FEB81	517	7.8	7.6	7	•	8.1	8

PARAMETER= POTASSIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	220	340			130	
27SEP79	2				850	140	
28SEP79	3	230	320			130	
01OCT79	6	220	290		830		75
02OCT79	7					110	66
04OCT79	9				880	100	
09OCT79	14	43	70	<40			
10OCT79	15						
16OCT79	21			5.3	230	96	59
25OCT79	30	43	130				
26OCT79	31			5		56	
29OCT79	34				270		
06NOV79	42	47	110	4.7		51	16
15NOV79	51				260		
19NOV79	55	45	110	4.5	180	44	
27NOV79	63						15
29NOV79	65	44	100	4.7	178	37	
05DEC79	71			4.4			
12DEC79	78	46	88		170	36	13
02JAN80	99			10			16
03JAN80	100			*			*
15JAN80	112	45	73		130	38	
21JAN80	118						15
28JAN80	125	39		9.8	120	39	
01FEB80	129		72				
08FEB80	136	40		9.8	110	36	15
19FEB80	147		70				
03MAR80	160			9.5	110		15
10MAR80	167	40	69	2.2		36	
27MAR80	184		110	2.1			11
03APR80	191				200	40	
15APR80	203		120	1.5			
23APR80	211						12
07MAY80	225				190		
15MAY80	233	63					

PARAMETER= POTASSIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		110				
23MAY80	241						11
29MAY80	247	64	130		120	33	
02JUN80	251			1.5			
09JUN80	258	85					
10JUN80	259					28	9.5
16JUN80	285		110	1.3			
01JUL80	280				118		9.5
16JUL80	295					33	
21JUL80	300	66			110		9.7
22JUL80	301					32	
24JUL80	303	62		1.2			
25JUL80	304			0.98	61	28	
29JUL80	308		110				
27AUG80	337			0.67			
06SEP80	347	56			66	24	
08SEP80	349		94				
07OCT80	378	53	89	1.1	65	19	
10OCT80	381						
18OCT80	389		85		27		
30OCT80	401	46					
10NOV80	412						3.4
21NOV80	423			0.97		18	
16JAN81	479				22		
21JAN81	484	27					
23JAN81	486		39				
23FEB81	517	25	39	0.32	20	12	3.9

PARAMETER= SILICON

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0					12	
26SEP79	1	11	9.3		73	11	
27SEP79	2					11	
28SEP79	3	11	7.2		81		26
01OCT79	6	13	7.8			16	28
02OCT79	7				85	15	
04OCT79	9			17			
09OCT79	14	19	7.4				
10OCT79	15					27	22
16OCT79	21			14	110		
25OCT79	30	26	17			43	
26OCT79	31			15			
29OCT79	34				140		
06NOV79	42	22	13	13		34	39
15NOV79	51				140		
19NOV79	55	12	10	11	150	23	
27NOV79	63						32
29NOV79	65	11	10	12	140	19	
05DEC79	71			11			
12DEC79	78	15	10		130	29	24
02JAN80	99			11			27
03JAN80	100			*			*
15JAN80	112	22	12		130	33	
21JAN80	118						26
28JAN80	125	13		12	120	26	
01FEB80	129		11				
08FEB80	136	13		11	130	26	23
19FEB80	147		10				
03MAR80	160			9.7	130		24
10MAR80	167	16	10	11		32	
27MAR80	184		11	11			23
03APR80	191				110	33	
15APR80	203		11	11			
23APR80	211						28
07MAY80	225				100		
15MAY80	233	17					

PARAMETER= SILICON

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		10				
23MAY80	241						
29MAY80	247	9.3	8.6				27
02JUN80	251				100	21	
09JUN80	258	7.9		9.3			
10JUN80	259						
16JUN80	265		7.4			11	
01JUL80	280			9.1			38
16JUL80	295				100		29
21JUL80	300	12				31	
22JUL80	301				99		33
24JUL80	303	5.3				19	
25JUL80	304			9			
29JUL80	308			8.4	92	8.5	
27AUG80	337		6.6				
06SEP80	347	13		8.9			
08SEP80	349		5.9		120	28	
07OCT80	378	4.8	5.6	8.1			
18OCT80	381				120	18	
18OCT80	389		4.9				
30OCT80	401	7.3			73		
10NOV80	412						
21NOV80	423						
16JAN81	479			8.4		12	42
21JAN81	484	9.1			100		
23JAN81	486		10				
23FEB81	517	17	11	9.2	100	16	41

PARAMETER= SILVER

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0					0.0051	
26SEP79	1	0.0085	0.032		0.17	<0.005	
27SEP79	2					<0.005	
28SEP79	3	0.012	0.053		0.17		<0.005
01OCT79	6	0.013	0.036			<0.005	<0.005
02OCT79	7				0.18	<0.005	
04OCT79	9			<0.005			
09OCT79	14	<0.006	0.37				
10OCT79	15					0.017	<0.005
16OCT79	21			0.43	0.54		
25OCT79	30	0.059	0.16			0.37	
26OCT79	31			0.42			
29OCT79	34				0.56		
06NOV79	42	0.12	0.26	0.41		0.37	0.38
15NOV79	51				0.55		
19NOV79	55	0.15	0.22	0.42	0.5	0.37	
27NOV79	63						0.4
29NOV79	65	0.18	0.36	0.4	0.49	0.38	
05DEC79	71			0.41			
12DEC79	78	0.2	0.42		0.48	0.39	0.41
02JAN80	99			0.57			0.53
03JAN80	100			•			•
15JAN80	112	0.016	0.43		0.62	0.54	
21JAN80	118						0.53
28JAN80	125	0.18		0.57	0.62	0.54	
01FEB80	129		0.56				
08FEB80	136	0.23		0.56	0.61	0.54	0.53
19FEB80	147		0.55				
03MAR80	160			0.56	0.61		0.53
10MAR80	167	0.36	0.62	<0.006		0.55	
27MAR80	184		<0.006	<0.006			<0.006
03APR80	191				0.081	<0.006	
15APR80	203		<0.006	<0.006			
23APR80	211						<0.006
07MAY80	225				0.081		
15MAY80	233	<0.006					

PARAMETER= SILVER

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		<0.006				
23MAY80	241						<0.006
29MAY80	247	<0.006	<0.006		0.066	<0.006	
02JUN80	251			<0.006			
09JUN80	258	<0.006					
10JUN80	259					<0.006	0.013
16JUN80	265		<0.006	<0.006			
01JUL80	280				0.054		0.013
16JUL80	295					<0.006	
21JUL80	300	<0.006			0.058		<0.006
22JUL80	301					<0.006	
24JUL80	303	<0.006		<0.006			
25JUL80	304			<0.006	0.046	<0.006	
29JUL80	308		<0.006				
27AUG80	337			<0.006			
06SEP80	347	<0.006			0.025	<0.006	
08SEP80	349		<0.006				
07OCT80	378	<0.006	<0.006	<0.006	0.013	<0.006	
10OCT80	381						
18OCT80	389		<0.006		0.026		
30OCT80	401	<0.044					
10NOV80	412						0.018
21NOV80	423			<0.002		<0.006	
16JAN81	479				0.052		
21JAN81	484	<0.005					
23JAN81	486		<0.005				
23FEB81	517	<0.005	<0.005	<0.005	<0.005	<0.005	0.01

PARAMETER= SODIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	7.5	28		39	550	
27SEP79	2					530	
28SEP79	3	<5	21			470	
01OCT79	6	<5	17		29		13
02OCT79	7					390	6.8
04OCT79	9				31	360	
09OCT79	14	11	21	<5			
10OCT79	15					320	5.7
16OCT79	21				110		
25OCT79	30	12	42	4.3		720	
26OCT79	31			4.5	138		
29OCT79	34					530	31
06NOV79	42	12	35	3.4	130		
15NOV79	51				91	360	
19NOV79	55	11	30	3			28
27NOV79	63				87	260	
29NOV79	65	11	23	3.7			24
05DEC79	71			3.6	90	230	
12DEC79	78	11	20				27
02JAN80	99			5.1			
03JAN80	100				<.0056	240	25
15JAN80	112	16	20	•			
21JAN80	118				<.0056	200	26
28JAN80	125	12		5.2			
01FEB80	129		20		<.0056	160	25
08FEB80	136	12		5			
19FEB80	147		19		40	150	27
03MAR80	160			4.5			
18MAR80	167	12	18	4.1			
27MAR80	184		21	4.1			
03APR80	191				60		30
15APR80	203		19	3.1		160	
23APR80	211						
07MAY80	225						
15MAY80	233	13					

PARAMETER= SODIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		18				
23MAY80	241						27
29MAY80	247	13	16		55	65	
02JUN80	251			3.2			
09JUN80	258	13					
10JUN80	259					40	29
16JUN80	265		12	3.7			
01JUL80	280				58		29
16JUL80	295					47	
21JUL80	300	14			60		30
22JUL80	301					36	
24JUL80	303	12		3.1			
25JUL80	304			3	60	31	
29JUL80	308		8.8				
27AUG80	337			3.4			
06SEP80	347	20			44	23	
08SEP80	349		7.3				
07OCT80	378	290	5.2	2.6	44	10	
10OCT80	381						
18OCT80	389		4.2		8.6		
30OCT80	401	5.7					
10NOV80	412						26
21NOV80	423			7		9.7	
16JAN81	479				<0.028		
21JAN81	484	5.3					
23JAN81	486		4				
23FEB81	517	3.5	3.5	2.2	<0.028	4.7	31

PARAMETER= SO4

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0					4400	
26SEP79	1	1500	2100		52000	3100	
27SEP79	2					2500	
28SEP79	3	1900	2100		45000		460
01OCT79	6	1700	2300			2200	460
02OCT79	7				50000	2100	
04OCT79	9			25			
09OCT79	14	1700	2500				
10OCT79	15					1900	520
16OCT79	21			18	53000		
25OCT79	30	1600	1900			1600	
26OCT79	31			17			
29OCT79	34				58000		
06NOV79	42	1600	2400	23		1300	420
15NOV79	51				49000		
19NOV79	55	1800	2300	27	33000	920	
27NOV79	63						450
29NOV79	65	1800	2400	25	26000	790	
05DEC79	71			22			
12DEC79	78	1800	2400		30000	780	440
02JAN80	99			.			.
03JAN80	100			31			420
15JAN80	112	1900	2500		30000	920	
21JAN80	118						370
28JAN80	125	1900		28	31000	820	
01FEB80	129		2600				
08FEB80	136	1800		27	28000	700	330
19FEB80	147		2600				
03MAR80	160			27	27000		300
10MAR80	167	1900	2700	.		700	
27MAR80	184		2700	28			3700
03APR80	191				40000	2700	
15APR80	203		2700	27			
23APR80	211						270
07MAY80	225				42000		
15MAY80	233	2100					

PARAMETER= SO4

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		3100				
23MAY80	241						
29MAY80	247	2000	2400				240
02JUN80	251				29000	490	
09JUN80	258	2100		23			
10JUN80	259						
16JUN80	265		2900			390	220
01JUL80	280			25			
16JUL80	295				19000		210
21JUL80	300	2000				450	
22JUL80	301				20000		200
24JUL80	303	1900				400	
25JUL80	304			25			
29JUL80	308		2600	29	11000	300	
27AUG80	337						
06SEP80	347	1900		23			
08SEP80	349		2500		13000	290	
07OCT80	378	1900	2400	73	9300	210	
10OCT80	381				6600		
18OCT80	389		2400				
30OCT80	401	2100			•		
10NOV80	412						
21NOV80	423						210
16JAN81	479			41		250	
21JAN81	484	2300			12000		
23JAN81	486		2300				
23FEB81	517	2300	2300	21	•	320	280

PARAMETER= STRONTIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	2.7	6.2			8.2	
27SEP79	2				1.4	8.6	
28SEP79	3	2.3	4.9			8.3	
01OCT79	6	2.2	3.9		0.93		0.98
02OCT79	7					7.2	0.3
04OCT79	9				0.96	6.9	
09OCT79	14	1.9	1.6	0.44			
10OCT79	15						
16OCT79	21					7.1	
25OCT79	30	1.6	3.1	0.22	0.95		0.33
26OCT79	31					8.2	
29OCT79	34			0.2			
06NOV79	42	1.7	2.6		1		
15NOV79	51			0.17		7.1	0.43
19NOV79	55	1.7	2.7		0.9		
27NOV79	63			0.16	0.82	6.9	
29NOV79	65	1.7	2.2	0.18			0.35
05DEC79	71			0.17	0.82	6.3	
12DEC79	78	1.6	2.1				
02JAN80	99				0.74	6.5	0.31
03JAN80	100			0.13			0.28
15JAN80	112	1.9	2	•			•
21JAN80	118				0.66	7.6	
28JAN80	125	1.8					0.26
01FEB80	129		2	0.13	0.67	9.1	
08FEB80	136	1.8					
19FEB80	147		2	0.13	0.78	8.2	0.27
03MAR80	160			0.12	0.89		
10MAR80	167	1.6	1.9	0.065		8.2	0.26
27MAR80	184		1.9	0.065			
03APR80	191				0.58	8.4	0.12
15APR80	203		1.7	0.059			
23APR80	211						
07MAY80	225						0.14
15MAY80	233	1.3			0.59		

PARAMETER= STRONTIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		1.8				
23MAY80	241						
29MAY80	247	1.4	2.3				0.11
02JUN80	251				0.6	7.1	
09JUN80	258	1.4		0.044			
10JUN80	259						
16JUN80	265					6.2	
01JUL80	280		1.8	0.044			0.1
16JUL80	295				0.75		
21JUL80	300	1.5				7.5	0.1
22JUL80	301				0.74		
28JUL80	303	1.4				7.4	0.098
25JUL80	304			0.039			
29JUL80	308			0.038	0.63	6.1	
27AUG80	337		1.9				
06SEP80	347	1.3		0.04			
08SEP80	349				0.58	7.2	
07OCT80	378	1.3	2				
10OCT80	381		2	0.042	0.86	6	
18OCT80	389						
30OCT80	401	1.1	1.9		0.52		
10NOV80	412						
21NOV80	423						
16JAN81	479			0.038		6.1	0.18
21JAN81	484	1.9			1.1		
23JAN81	486		2.3				
23FEB81	517	1.8	2.4	0.047	0.98	9.2	0.17

PARAMETER= TDS

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0					7600	
26SEP79	1	5000	14000		82000	7800	
27SEP79	2					6800	
28SEP79	3	4500	11000		70000		1300
01OCT79	6	4800	8600			5000	1100
02OCT79	7				78000	6000	
04OCT79	9			180			
09OCT79	14	4200	7200				
10OCT79	15					5600	1200
16OCT79	21			110	81000		
25OCT79	30	3500	6600			4800	
26OCT79	31			110			
29OCT79	34				89000		
06NOV79	42	3300	6000	83		4000	1200
15NOV79	51				90000		
19NOV79	55	3400	5600	160	55000	2100	
27NOV79	63						1100
29NOV79	65	3300	4900	110	53000	2700	
05DEC79	71			210			
12DEC79	78	3600	5100		60000	1700	1200
02JAN80	99			•			•
03JAN80	100			150			970
15JAN80	112	3000	4400		64000	2200	
21JAN80	118						770
28JAN80	125	3200		110	57000	1700	
01FEB80	129		4500				
08FEB80	136	3600		50	58000	1500	760
19FEB80	147		4000				
03MAR80	160			170	54000		970
10MAR80	167	3400	4100	300		1600	
27MAR80	184		4600	180			720
03APR80	191				52000	1600	
15APR80	203		4500	62			
23APR80	211						780
07MAY80	225				58000		
15MAY80	233	3400					

PARAMETER= BOS

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		4500				
23MAY80	241						620
29MAY80	247	3700	4900		32000	1100	
02JUN80	251			160			
09JUN80	258	3600					
10JUN80	259					820	560
16JUN80	265		4500	220			
01JUL80	280				29000		560
16JUL80	295					1000	
21JUL80	300	3600			29000		640
22JUL80	301					690	
25JUL80	303	3100		45			
25JUL80	304			61	16000	730	
29JUL80	308		4300				
27AUG80	337			56			
06SEP80	347	3300			19000	400	
08SEP80	349		4300				
07OCT80	378	3400	4400	140	12000	440	
10OCT80	381				9200		
18OCT80	389		4000		.		
30OCT80	401	3700					
10NOV80	412						610
21NOV80	423			460		840	
16JAN81	479				18000		
21JAN81	484	3500					
23JAN81	486		4000				
23FEB81	517	3600	3900	110	.	590	570

PARAMETER= TITANIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	0.017	0.038		0.25	0.0048	
27SEP79	2					0.0058	
28SEP79	3	0.018	0.035		0.13	0.0049	
01OCT79	6	0.023	0.033				<0.002
02OCT79	7					0.0027	<0.002
04OCT79	9				0.15	<0.002	
09OCT79	14	0.058	0.67	<0.002			
10OCT79	15						
16OCT79	21					<0.002	<0.002
25OCT79	30	0.16	0.2	0.64	0.75		
26OCT79	31					0.53	
29OCT79	34			0.63			
06NOV79	42	0.25	0.34		0.73		
15NOV79	51			0.6		0.54	0.55
19NOV79	55	0.31	0.28		0.69		
27NOV79	63			0.62	0.64	0.53	
29NOV79	65	0.36	0.51				0.59
05DEC79	71			0.6	0.63	0.54	
12DEC79	78	0.38	0.66	0.6			
02JAN80	99				0.62	0.56	0.6
03JAN80	100			1.1			0.96
15JAN80	112	0.025	0.77	*			*
21JAN80	118				1	1	
28JAN80	125	0.32					0.97
01FEB80	129		1	1	1	0.99	
08FEB80	136	0.42					
19FEB80	147		1	1	1	0.99	0.98
03MAR80	160			1	1		0.98
10MAR80	167	0.66	1.1	0.036		1	
27MAR80	184		<0.015	0.036			<0.015
03APR80	191				<0.015	<0.015	
15APR80	203		<0.015	<0.015			
23APR80	211						<0.015
07MAY80	225				0.022		
15MAY80	233	0.067					

PARAMETER= TITANIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		0.056				
23MAY80	241						
29MAY80	247	0.14	0.06				<0.015
02JUN80	251				0.053	<0.015	
09JUN80	258	0.026		<0.015			
10JUN80	259						
16JUN80	265		<0.015	<0.015		<0.019	0.029
01JUL80	280						
16JUL80	295				<0.019		0.029
21JUL80	300	<0.015				<0.015	
22JUL80	301				<0.019		<0.015
24JUL80	303	<0.015				<0.015	
25JUL80	304			0.016			
29JUL80	308		<0.015	0.021	<0.019	<0.015	
27AUG80	337						
06SEP80	347	<0.015		<0.015			
08SEP80	349		0.11		<0.015	<0.015	
07OCT80	378	<0.015	<0.015	<0.015	<0.015	<0.015	
10OCT80	381						
18OCT80	389		<0.015		•		
30OCT80	401	<0.016			<0.015		
10NOV80	412						
21NOV80	423			<0.008			<0.025
16JAN81	479					<0.015	
21JAN81	484	<0.025			0.06		
23JAN81	486		<0.025				
23FEB81	517	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

PARAMETER= TOC

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	12	6.6			24	
27SEP79	2				37	19	
28SEP79	3	6.2	2.1			11	
01OCT79	6	6.5	2.2		23		54
02OCT79	7					9.3	21
04OCT79	9				29	7.7	
09OCT79	14	6.2	3	30			
10OCT79	15						
16OCT79	31					12	35
25OCT79	30	7.4	5	25	35		
26OCT79	31					7.9	
29OCT79	34			19			
06NOV79	42	6.7	2.6	7.3	•	5.9	160
15NOV79	51				15		
19NOV79	55	4.8	1.7	5.1	•	•	
27NOV79	63						
29NOV79	65	4.1	1.8	4.9	•	3	70
05DEC79	71			12			
12DEC79	78	5	•		•	•	•
02JAN80	99			•			•
03JAN80	100			8			39
15JAN80	122	5.8	2.8		•	4.9	
21JAN80	118						25
28JAN80	125	4.4		4.6	•	4.2	
01FEB80	129		3.7				
08FEB80	136	3.7		2.1	•	3.1	19
19FEB80	147		3.8				
03MAR80	160			2.4	•		18
10MAR80	167	•	•	•		•	
17MAR80	184		•	•			•
03APR80	191				•	•	
15APR80	203		•	•			
23APR80	211				•		•
07MAY80	225						
15MAY80	233	•					

PARAMETER= TOC

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		•				
23MAY80	241						
29MAY80	247	•	•				•
02JUN80	251			•	•	•	
09JUN80	258	•					
10JUN80	259						
16JUN80	265		•	•		•	•
01JUL80	280						
16JUL80	295				•		•
21JUL80	300	•				•	
22JUL80	301				•		•
24JUL80	303	•				•	
25JUL80	304			•			
29JUL80	308			•	•	•	
27AUG80	337		•				
06SEP80	347	2.4		1.8			
08SEP80	349				0	2.2	
07OCT80	378	1.8	2.9 1.6	0.9			
10OCT80	381				2.1	2.1	
18OCT80	389		1.2		2.7		
30OCT80	401	•			•		
10NOV80	412						
21NOV80	423						•
16JAN81	479			•		•	
21JAN81	484	•			•		
23JAN81	486		•				
23FEB81	517	•	•	•	•	•	•

PARAMETER= VANADIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0						
26SEP79	1	0.38	0.88		1.3	0.27	
27SEP79	2					0.27	
28SEP79	3	0.38	0.86			0.25	
01OCT79	6	0.37	0.8		1.2		0.13
02OCT79	7					0.22	0.14
04OCT79	9				1.4	0.2	
09OCT79	14	0.097	0.52	<0.01			
10OCT79	15						
16OCT79	21					0.2	0.15
25OCT79	30	0.17	0.54	0.52	3.9		
26OCT79	31					0.46	
29OCT79	34			0.5			
06NOV79	42	0.24	0.52		8.3		
15NOV79	51			0.48		0.45	0.47
19NOV79	55	0.27	0.45		8.1		
27NOV79	63			0.5	4.2	0.44	
29NOV79	85	0.82	0.59	0.47			0.5
05DEC79	71			0.48	2.8	0.46	
12DEC79	78	0.34	0.61				
02JAN80	99			0.72	1.3	0.47	0.5
03JAN80	100			•			0.66
15JAN80	112	0.059	0.6				•
21JAN80	118				1.2	0.69	
28JAN80	125	0.24		0.71			0.66
01FEB80	129		0.77		1.2	0.68	
08FEB80	136	0.32		0.7			
19FEB80	147		0.75		1.1	0.69	0.67
03MAR80	160			0.69			
10MAR80	167	0.48	0.83	0.048	1.1		0.67
27MAR80	184		<0.089	<0.089		0.69	
03APR80	191						0.046
15APR80	203		<0.089	0.032	0.49	<0.089	
23APR80	211						
07MAY80	225						0.018
15MAY80	233	0.12			0.48		

PARAMETER= VANADIUM

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		0.15				
23MAY80	241						<0.009
29MAY80	247	0.16	0.028		0.034	<0.009	
02JUN80	251			<0.009			
09JUN80	258	0.18				<0.009	0.019
10JUN80	259						
16JUN80	265		<0.009	<0.009			
01JUL80	280				0.016		0.11
16JUL80	295					0.064	
21JUL80	300	<0.009			0.017		0.028
22JUL80	301					0.012	
24JUL80	303	<0.009		0.051			
25JUL80	304			0.027	0.023	0.022	
29JUL80	308		<0.009				
27AUG80	337			<0.009			
06SEP80	347	<0.009			0.011	<0.009	
08SEP80	349		0.087				
07OCT80	378	<0.009	<0.009	<0.009	0.011	<0.009	
10OCT80	381						
18OCT80	389		<0.009		<0.009		
30OCT80	401	<0.009					
10NOV80	412						<0.015
21NOV80	423			<0.019		<0.009	
16JAN81	479				0.086		
21JAN81	484	<0.015					
23JAN81	486		<0.015				
23FEB81	517	<0.015	<0.015	<0.015	0.2	<0.015	<0.015

PARAMETER= ZINC

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
25SEP79	0					0.082	
26SEP79	1	0.098	0.3		140	0.042	
27SEP79	2					0.034	
28SEP79	3	0.045	0.3		110		0.027
01OCT79	6	0.051	0.27			0.026	0.03
02OCT79	7				120	0.03	
04OCT79	9			0.19			
09OCT79	14	0.078	0.27				
10OCT79	15					0.059	0.062
16OCT79	21			<0.039	170		
25OCT79	30	0.057	0.21			0.12	
26OCT79	31			<0.039			
29OCT79	34				180		
06NOV79	42	0.051	0.26	<0.039		<0.039	<0.039
15NOV79	51				170		
19NOV79	55	0.046	0.42	<0.039	120	<0.039	
27NOV79	63						0.93
29NOV79	65	0.051	0.062	<0.039	110	<0.039	
05DEC79	71			<0.039			
12DEC79	78	<0.039	0.49		110	<0.039	3.1
02JAN80	99			<0.013			<0.013
03JAN80	100			•			•
15JAN80	112	0.039	0.36		110	0.016	
21JAN80	118						<0.013
28JAN80	125	0.02		0.018	99	<0.013	
01FEB80	129		0.4				
08FEB80	136	0.014		<0.013	87	<0.013	<0.013
19FEB80	147		0.46				
03MAR80	160			<0.013	86		<0.013
10MAR80	167	0.026	0.35	0.017		<0.013	
27MAR80	184		0.32	0.017			0.012
03APR80	191				67	0.035	
15APR80	203		0.24	<0.009			
23APR80	211						0.04
07MAY80	225				65		
15MAY80	233	0.088					

PARAMETER= ZINC

SAMPLE DATE	DAY	COL A (SANDSTONE)	COL B (SHALE)	COL C (ALLUVIUM)	COL D (INTERBURDEN)	COL E (LIMESTONE)	COL F (TILL)
16MAY80	234		0.26				
23MAY80	241						0.022
29MAY80	247	0.11	0.32		36	0.023	
02JUN80	251			0.016			
09JUN80	258	0.12					
10JUN80	259					<0.009	<0.009
16JUN80	265		0.19	<0.009			
01JUL80	280				32		<0.009
16JUL80	295					<0.009	
21JUL80	300	0.086			32		0.011
22JUL80	301					0.013	
24JUL80	303	0.15		<0.009			
25JUL80	304			<0.009	19	0.014	
29JUL80	308		0.17				
27AUG80	337			0.019			
06SEP80	347	0.1			22	0.021	
08SEP80	349		0.25				
07OCT80	378	0.09	0.22	0.12	22	0.021	
10OCT80	381						
18OCT80	389		0.2		8.9		
30OCT80	401	0.094					
10NOV80	412						0.039
21NOV80	423			<0.013		0.021	
16JAN81	479				21		
21JAN81	484	0.12					
23JAN81	486		0.16				
23FEB81	517	0.11	0.13	<0.015	19	0.046	0.16

J.9 Laboratory Leaching Column (Waste and Disposal Media) Leachate Studies

Column leaching experiments were also performed in the laboratory using both waste and disposal media. These columns were similar to the field cells, but were at reduced scale. They were designed as a point of reference between the batch equilibration tests and the full-size field cells.

A limited program consisting of five columns was performed. The two prinicpal objectives were: 1) to define the column leaching and attenuation/mobilization behavior of Exxon PFBC and Alliance AFBC wastes with the sandstone and shale media respectively; and 2) to determine the difference between the leaching behavior of ground and unground Exxon PFBC waste. Two columns per waste were required, the first to define the leaching behavior of ground waste, and the second to determine the attenuation/mobilization interaction with a disposal medium. Because only one disposal medium could be investigated with each waste, the attenuation/mobilization of Alliance AFBC waste with sandstone and the attenuation/mobilization of Exxon PFBC waste with shale were selected. A fifth column containing unground Exxon PFBC waste was included for comparison with the column containing ground PFBC waste.

The codes for the laboratory leaching columns are as follows:

Column	Waste	Medium
LC-1	Alliance AFBC (Ground)	Sandstone
LC-2	Exxon PFBC (Ground)	Shale
LC-3	Exxon PFBC (Unground)	Shale
LC-4	Alliance AFBC (Ground)	Sandstone
LC-5	Alliance AFBC (Ground)	Shale

The format of data presentation is similar to the laboratory control (media only) columns (Section J.8) in that all sample dates for all columns for a single element are presented, followed by a similar table

for the next element, and so forth, alphabetically through all the parameters analyzed. Samples were taken less frequently, and the column leaching study included much less time than the laboratory control columns.

SAMPLE DATE	DAY	COL 1 AFBC SANDSTONE	COL 2 PFBC SHALE	COL 3 PFBC SHALE	COL 4 AFBC SANDSTONE	COL 5 PFBC SHALE
PARAMETER= ALUMINUM						
07JUL81	0	1.4	1.7	1.9	3.7	2.1
29JUL81	22	<0.25	<0.25	<0.25	1.6	<0.25
20AUG81	44	<0.25	0.5	1.2	3.7	1.6
02SEP81	57	0.49	1.1	1.8	3.1	1.3
16SEP81	71	<0.25	0.32	<0.25	0.65	1.5
01OCT81	86	<0.25	<0.25	<0.25	<0.25	0.35
16OCT81	101	<0.25	<0.25	<0.25	0.86	<0.25
29OCT81	114	<0.25	<0.25	<0.25	<0.25	0.81
PARAMETER= BARIUM						
07JUL81	0	0.78	0.64	0.79	0.79	0.49
29JUL81	22	0.95	1.2	0.92	0.88	1
20AUG81	44	0.4	0.33	0.36	0.32	0.33
02SEP81	57	0.44	0.39	0.41	0.33	0.33
16SEP81	71	0.76	0.65	0.66	0.67	0.66
01OCT81	86	0.93	0.8	0.71	0.81	1.2
16OCT81	101	1.2	0.79	0.8	0.82	1
29OCT81	114	0.85	0.94	0.89	0.81	0.93
PARAMETER= BORON						
07JUL81	0	1.7	26	25	2.3	1.3
29JUL81	22	1.5	6.9	3.9	2.9	3.2
20AUG81	44	<0.045	1.6	2.3	1.2	1.3
02SEP81	57	<0.045	1.7	2.3	1.3	2.4
16SEP81	71	4.1	7.6	6.6	5.7	13
01OCT81	86	1.6	3.7	3.8	3.1	2.9
16OCT81	101	2.1	4	3.7	3.3	2.1
29OCT81	114	1.2	3.6	3.8	2.3	3.5

SAMPLE DATE	DAY	COL 1 AFBC SANDSTONE	COL 2 PFBC SHALE	COL 3 PFBC SHALE	COL 4 AFBC SANDSTONE	COL 5 PFBC SHALE
PARAMETER= CADMIUM						
07JUL81	0	<0.04	<0.04	<0.04	<0.04	<0.04
29JUL81	22	<0.01	<0.01	<0.01	0.016	<0.01
20AUG81	44	<0.042	<0.042	<0.042	<0.042	<0.042
02SEP81	57	<0.042	<0.042	<0.042	<0.043	<0.042
16SEP81	71	<0.042	<0.042	<0.042	<0.043	<0.042
01OCT81	86	<0.01	<0.01	<0.01	<0.01	<0.01
16OCT81	101	<0.01	<0.01	<0.01	<0.01	<0.01
29OCT81	114	<0.01	<0.01	<0.01	<0.01	0.015
PARAMETER= CALCIUM						
07JUL81	0	1200	1000	880	1300	1300
29JUL81	22	1300	570	390	530	660
20AUG81	44	730	400	300	480	480
02SEP81	57	940	500	570	500	470
16SEP81	71	1100	680	640	430	590
01OCT81	86	1200	720	420	660	250
16OCT81	101	880	660	300	680	220
29OCT81	114	1200	300	690	250	300
PARAMETER= CHLORIDES						
07JUL81	0	1200	410	260	1300	220
29JUL81	22	110	32	94	90	88
20AUG81	44	39	20	46	19	29
02SEP81	57	26	20	37	18	33
16SEP81	71	41	18	27	21	23
01OCT81	86	29	16	28	38	18
16OCT81	101	4.3	12	21	25	17
29OCT81	114	9.8	18	17	14	18

SAMPLE DATE	DAY	COL 1 AFBC SANDSTONE	COL 2 PFBC SHALE	COL 3 PFBC SHALE	COL 4 AFBC SANDSTONE	COL 5 PFBC SHALE
PARAMETER= CHROMIUM						
07JUL81	0	0.33	0.33	0.43	0.22	0.24
29JUL81	22	0.029	0.087	0.15	0.14	0.12
20AUG81	44	<0.005	<0.005	0.089	0.046	<0.005
02SEP81	57	<0.005	0.059	0.26	0.093	<0.005
16SEP81	71	0.026	0.018	<0.005	<0.005	0.07
010CT81	86	0.017	0.024	<0.005	0.017	0.039
160CT81	101	0.091	0.046	0.03	0.012	<0.005
290CT81	114	<0.005	<0.005	<0.005	0.047	0.05
PARAMETER= COBALT						
07JUL81	0	<0.03	<0.03	<0.03	<0.03	<0.03
29JUL81	22	<0.03	<0.03	<0.03	<0.03	<0.03
20AUG81	44	<0.03	<0.03	0.035	<0.03	<0.03
02SEP81	57	<0.03	0.035	0.085	0.046	<0.03
16SEP81	71	<0.03	<0.03	<0.03	<0.03	0.043
010CT81	86	<0.03	<0.03	<0.03	<0.03	<0.03
160CT81	101	<0.03	<0.03	<0.03	<0.03	<0.03
290CT81	114	<0.03	<0.03	<0.03	<0.03	<0.03
PARAMETER= CONDUCTIVITY						
07JUL81	0	7300	6500	6200	5500	4000
29JUL81	22	5900	6500	7800	3900	2700
20AUG81	44	7000	9500	8500	3500	3100
02SEP81	57	7900	7000	6300	3500	3400
16SEP81	71	5800	4200	4200	2800	3700
010CT81	86	7000	3600	2700	1600	3200
160CT81	101	7200	3600	3800	1500	2700
290CT81	114	7000	3400	3700	1500	2400

SAMPLE DATE	BAY	COL 1 AFBC SANDSTONE	COL 2 PFBC SHALE	COL 3 PFBC SHALE	COL 4 AFBC SANDSTONE	COL 5 PFBC SHALE
PARAMETER= COPPER						
07JUL81	0	0.043	0.083	0.066	0.04	0.025
29JUL81	22	<0.005	0.027	0.06	0.1	0.062
20AUG81	44	<0.005	0.007	0.12	<0.005	<0.005
02SEP81	57	<0.005	0.1	0.27	0.13	<0.005
16SEP81	71	<0.005	0.01	<0.005	<0.005	0.084
010CT81	86	<0.005	0.016	<0.005	<0.005	0.04
160CT81	101	0.073	0.062	0.024	<0.005	<0.005
290CT81	114	<0.005	<0.005	<0.005	0.094	0.05
PARAMETER= FLUORIDES						
07JUL81	0	0.52	0.69	0.67	0.67	0.69
29JUL81	22	0.36	0.82	0.67	0.3	0.4
20AUG81	44	0.28	0.67	0.57	0.41	0.29
02SEP81	57	0.24	0.41	0.4	0.43	0.28
16SEP81	71	0.23	0.34	0.35	0.48	0.32
010CT81	86	0.46	0.35	0.34	0.48	0.27
160CT81	101	0.24	0.33	0.25	0.47	0.36
290CT81	114	0.21	0.34	0.28	0.47	0.32
PARAMETER= IRON						
07JUL81	0	<0.04	<0.04	<0.04	<0.04	0.82
29JUL81	22	0.17	0.12	0.34	0.096	0.088
20AUG81	44	<0.038	<0.038	0.31	0.075	<0.038
02SEP81	57	0.049	0.083	0.12	0.17	0.077
16SEP81	71	<0.038	<0.038	<0.038	0.2	0.14
010CT81	86	0.061	0.05	0.12	<0.04	0.53
160CT81	101	0.11	0.19	0.11	<0.04	0.39
290CT81	114	<0.04	<0.04	<0.04	0.67	0.22

SAMPLE DATE	DAY	COL 1 AFBC SANDSTONE	COL 2 PFBC SHALE	COL 3 PFBC SHALE	COL 4 AFBC SANDSTONE	COL 5 PFBC SHALE
PARAMETER= LITHIUM						
07JUL81	0	2	0.17	0.45	0.09	<0.002
29JUL81	22	0.26	4.2	3.3	0.14	0.054
20AUG81	44	1.1	2.1	2.7	0.037	<0.002
02SEP81	57	0.76	1.3	1.4	0.11	<0.002
16SEP81	71	0.48	0.55	0.5	<0.002	0.049
010CT81	86	0.34	0.35	<0.002	0.41	0.021
160CT81	101	2.1	0.31	<0.002	0.29	<0.002
290CT81	114	0.29	0.17	0.17	0.072	0.074
PARAMETER= MAGNESIUM						
07JUL81	0	0.34	0.42	0.45	260	3
29JUL81	22	<0.17	<0.17	0.46	370	71
20AUG81	44	<0.17	<0.17	0.64	350	140
02SEP81	57	<0.17	0.69	1.3	230	130
16SEP81	71	<0.17	<0.17	<0.17	130	120
010CT81	86	<0.17	<0.17	79	<0.17	47
160CT81	101	0.33	0.4	48	<0.17	37
290CT81	114	<0.17	<0.17	<0.17	39	49
PARAMETER= MANGANESE						
07JUL81	0	<0.006	<0.006	<0.006	0.11	0.011
29JUL81	22	<0.006	<0.006	<0.006	<0.006	<0.006
20AUG81	44	<0.006	<0.006	<0.006	0.43	0.18
02SEP81	57	<0.006	<0.006	<0.006	1.7	0.37
16SEP81	71	<0.006	<0.006	<0.006	1.9	0.52
010CT81	86	<0.006	<0.006	0.44	<0.006	1.1
160CT81	101	<0.006	<0.006	0.37	<0.006	0.94
290CT81	114	<0.006	<0.006	<0.006	1.2	0.53

SAMPLE DATE	DAY	COL 1 AFBC SANDSTONE	COL 2 PFBC SHALE	COL 3 PFBC SHALE	COL 4 AFBC SANDSTONE	COL 5 PFBC SHALE
PARAMETER= MOLYBDENUM						
07JUL81	0	0.29	2.8	2.4	<0.01	<0.01
29JUL81	22	0.5	2.3	1.7	0.063	0.05
20AUG81	44	0.58	0.64	0.8	0.017	0.031
02SEP81	57	0.6	0.32	0.39	0.097	0.039
16SEP81	71	0.54	0.13	0.14	0.013	0.1
010CT81	86	0.53	0.11	0.035	0.11	0.019
160CT81	101	0.92	0.094	0.13	0.11	0.021
290CT81	114	0.49	0.048	0.074	0.11	0.31
PARAMETER= NICKEL						
07JUL81	0	0.099	0.097	0.14	0.03	0.18
29JUL81	22	<0.015	<0.015	0.029	0.042	0.033
20AUG81	44	<0.015	0.055	0.06	0.056	0.028
02SEP81	57	0.027	0.053	0.095	0.095	0.035
16SEP81	71	<0.015	0.026	0.022	<0.015	0.07
010CT81	86	<0.015	<0.015	<0.015	<0.015	0.029
160CT81	101	<0.015	0.022	<0.015	<0.015	<0.015
290CT81	114	<0.015	<0.015	<0.015	0.038	0.047
PARAMETER= PH						
07JUL81	0	12	12	12	7.2	9
29JUL81	22	12	12	12	7.7	9
20AUG81	44	12	12	12	7.4	7.6
02SEP81	57	12	12	12	7	7.4
16SEP81	71	12	12	12	7.2	7.4
010CT81	86	12	12	12	7.2	7.5
160CT81	101	12	12	12	7.8	7.7
290CT81	114	12	11	11	7.2	7.4

SAMPLE DATE	BAY	COL 1 AFBC SANDSTONE	COL 2 PFBC SHALE	COL 3 PFBC SHALE	COL 4 AFBC SANDSTONE	COL 5 PFBC SHALE
PARAMETER= POTASSIUM						
07JUL81	0	670	220	330	120	38
29JUL81	22	70	3500	2500	160	65
20AUG81	44	320	1000	1200	140	64
02SEP81	57	190	570	490	110	57
16SEP81	71	100	260	240	86	65
010CT81	86	76	200	50	210	58
160CT81	101	950	170	48	160	55
290CT81	114	87	150	120	68	60
PARAMETER= SILICON						
07JUL81	0	0.63	1	4.1	9.1	11
29JUL81	22	0.5	1.7	2.5	13	7.9
20AUG81	44	0.7	2.2	3.6	14	9
02SEP81	57	0.57	1.9	1.9	12	11
16SEP81	71	0.38	1.5	1.2	11	12
010CT81	86	0.6	2.1	10	1.6	11
160CT81	101	0.86	2.5	10	1.7	11
290CT81	114	0.41	2.5	1.6	10	9
PARAMETER= SILVER						
07JUL81	0	<0.005	<0.005	<0.005	<0.005	<0.005
29JUL81	22	<0.01	<0.01	0.017	<0.01	<0.01
20AUG81	44	<0.009	<0.009	<0.01	<0.009	<0.009
02SEP81	57	<0.009	<0.01	<0.01	<0.01	<0.009
16SEP81	71	<0.01	<0.01	<0.01	<0.01	0.096
010CT81	86	<0.01	<0.01	<0.002	<0.01	<0.01
160CT81	101	<0.01	0.02	<0.01	<0.01	<0.01
290CT81	114	<0.01	<0.01	<0.01	0.017	0.02

SAMPLE DATE	DAY	COL 1 AFBC SANDSTONE	COL 2 PFBC SHALE	COL 3 PFBC SHALE	COL 4 AFBC SANDSTONE	COL 5 PFBC SHALE
PARAMETER= SODIUM						
07JUL81	0	250	260	320	160	86
29JUL81	22	16	1200	890	140	180
20AUG81	44	75	470	530	72	160
02SEP81	57	41	270	220	57	180
16SEP81	71	24	120	120	45	340
010CT81	86	17	89	390	90	39
160CT81	101	180	76	320	70	26
290CT81	114	18	68	51	22	220
PARAMETER= SO4						
07JUL81	0	1500	1500	1800	1600	2000
29JUL81	22	1400	3000	2900	2800	2100
20AUG81	44	1100	2800	2700	2500	3700
02SEP81	57	1100	2000	1900	2400	2100
16SEP81	71	2000	1600	1500	1900	2600
010CT81	86	960	1400	1300	660	1800
160CT81	101	2000	1500	1400	610	1500
290CT81	114	2000	1500	1400	700	1400
PARAMETER= STRONTIUM						
07JUL81	0	68	3.7	3.5	3.6	3
29JUL81	22	23	3.5	2.7	2.6	1.4
20AUG81	44	21	2.8	2.6	2.3	1.2
02SEP81	57	26	2.7	2.8	2.1	1.2
16SEP81	71	26	2	2.3	1.6	1.2
010CT81	86	24	1.4	0.85	1.9	0.86
160CT81	101	33	1.2	0.61	1.7	0.66
290CT81	114	24	1.2	1.3	0.74	0.59

SAMPLE DATE	DAY	COL 1 AFBC SANDSTONE	COL 2 PFBC SHALE	COL 3 PFBC SHALE	COL 4 AFBC SANDSTONE	COL 5 PFBC SHALE
PARAMETER= TDS						
07JUL81	0	5600	5400	4200	6800	5100
29JUL81	22	7000	6700	6900	4600	3400
20AUG81	44	2800	5400	5100	3900	3100
02SEP81	57	3200	3700	3300	3300	2800
16SEP81	71	3100	2900	2900	3000	4000
01OCT81	86	3500	2800	1900	1200	3200
16OCT81	101	3400	2500	2600	860	2300
29OCT81	114	3400	2500	2200	840	1700
PARAMETER= TITANIUM						
07JUL81	0	<0.025	<0.025	<0.025	<0.025	<0.025
29JUL81	22	<0.025	<0.025	0.16	0.13	0.08
20AUG81	44	<0.025	<0.025	0.2	<0.025	<0.025
02SEP81	57	<0.025	0.1	0.37	0.16	<0.025
16SEP81	71	<0.025	<0.025	<0.025	<0.025	0.15
01OCT81	86	<0.025	<0.025	<0.025	<0.025	0.039
16OCT81	101	0.1	0.12	0.033	<0.025	<0.025
29OCT81	114	<0.025	<0.025	<0.025	0.14	0.16
PARAMETER= VANADIUM						
07JUL81	0	<0.015	<0.015	<0.015	<0.015	<0.015
29JUL81	22	<0.015	<0.015	0.14	0.2	0.11
20AUG81	44	<0.015	0.05	0.24	0.081	<0.015
02SEP81	57	<0.015	0.2	0.38	0.26	<0.015
16SEP81	71	0.08	0.048	<0.015	<0.015	0.16
01OCT81	86	<0.015	0.026	<0.015	<0.015	<0.015
16OCT81	101	0.099	0.1	0.028	<0.015	<0.015
29OCT81	114	<0.015	<0.015	<0.015	0.879	0.093

SAMPLE DATE	BAY	COL 1 AFBC SANDSTONE	COL 2 PFBC SHALE	COL 3 PFBC SHALE	COL 4 AFBC SANDSTONE	COL 5 PFBC SHALE
PARAMETER= ZINC						
07JUL81	0	0.072	0.086	0.31	0.25	0.14
29JUL81	22	0.064	0.65	0.23	0.079	0.024
20AUG81	44	0.18	0.3	0.34	0.34	0.32
02SEP81	57	0.15	0.22	0.16	0.058	0.39
16SEP81	71	0.18	0.14	0.12	0.34	0.48
010CT81	86	0.088	0.033	0.22	0.021	<0.015
160CT81	101	0.21	<0.015	0.11	0.14	<0.015
290CT81	114	0.11	<0.015	<0.015	<0.015	0.24

J.10 Analysis of Leachates from the Exxon PFBC Field Cells

Thirteen hydrologically isolated field cells were constructed and operated in order to observe behavior of FBC wastes in a variety of disposal environments under field conditions (see Appendix E). The goal of this effort was to observe the generation and attenuation of leachate from various combinations of FBC wastes and disposal media. The field cells were large-diameter, disturbed-media lysimeters which simulated FBC landfills as closely as practicable. The cells contained an upper sampling point below the waste layer to allow leachate to be collected after generation. A second sampling point below the lower disposal medium layer allowed leachate to be collected after exposure to the media so that an assessment could be made of the attenuation of the leachate.

The chemical analytical data from the upper and lower sample points of the Exxon PFBC field cells (Cells 1 to 6) are presented in this section. The data are reported by chemical parameter for the entire sampling duration (by date and day reading down the page) for each of the cells. The data for each cell are shown across the page, with a value given for the upper and lower sampling points. The elapsed days include two entries -- day (A) or actual days since field cell startup date, and day (O) or operational days which reflect the 135 days (from 26 December 1980 to 1 June 1981) that the Exxon PFBC field cells were not in operation.

An effort has been made to characterize the missing values are characterized in the table by several codes (e.g., V, I, E, D) which are explained in footnotes. A period (.) indicates a value missing for an undetermined cause. A blank indicates that no sample was taken.

PARAMETER= ALUMINUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.21	0.093	0.12	0.12	0.33	0.073	0.12	0.13	0.38	<0.06	0.74	0.27
06AUG79	2	2	0.4	0.21	0.13	0.27	0.28	V	0.14	0.13	0.062	<0.06	0.43	0.19
07AUG79	3	3	<0.06	0.18	0.11	0.09	0.075	V	<0.06	0.084	0.071	<0.06	<0.06	0.21
08AUG79	4	4	V	0.083	0.14	0.082	V	V	0.13	0.091	V	<0.06	V	0.12
11AUG79	7	7	0.083	0.19	0.16	0.12	0.081	<0.06	<0.06	<0.06	<0.06	<0.06	0.06	0.23
12AUG79	8	8	0.081	0.28	0.13	0.14	0.13	<0.06	0.1	0.095	0.087	<0.06	0.075	0.21
14AUG79	10	10	0.069	0.075	0.097	<0.06	0.13	0.072	<0.06	0.079	0.066	<0.06	0.064	0.21
16AUG79	12	12	0.1	<0.06	0.092	0.07	0.09	<0.06	<0.06	0.094	0.097	0.096	0.11	0.19
19AUG79	15	15	0.077	0.11	0.14	0.13	0.13	0.081	0.078	0.1	0.077	<0.06	0.078	0.16
24AUG79	20	20	0.063	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.13
28AUG79	24	24	0.29	0.23	0.26	0.19	0.35	0.36	0.34	0.37	0.36	0.3	0.38	0.39
02SEP79	29	29	0.23	0.25	0.24	0.39	0.38	0.38	0.33	0.42	0.37	0.3	0.39	0.44
09SEP79	36	36	0.41	0.37	0.42	0.37	0.4	0.35	0.39	0.31	0.33	0.2	0.32	0.39
20SEP79	47	47	0.15	0.12	0.19	0.11	0.18	0.13	0.11	0.13	0.092	0.09	0.19	0.19
29SEP79	56	56	0.091	0.084	0.11	0.11	0.095	<0.06	<0.06	0.075	0.08	0.081	0.13	0.15
14OCT79	71	71	0.24	0.13	0.12	0.14	0.14	0.072	<0.06	0.084	0.11	0.88	0.41	0.2
01NOV79	89	89	0.14	0.086	0.26	0.19	0.11	0.16	0.12	0.27	0.19	0.59	0.14	0.17
24NOV79	112	112	2.3	2	2.7	2.5	2.3	3.2	1.9	2.5	1.9	2.2	4.6	4
14DEC79	132	132	1.7	2.1	2.5	2.6	1.2	3.1	1	2.2	1.9	1.9	2.2	3.6
17JAN80	166	166	1.5	2.5	2.8	2.1	0.79	3.3	0.72	2.5	0.53	2.3	1.9	4.8
06MAR80	215	215	0.36	1.1	1.2	1.1	0.22	1.4	0.2	1.2	0.55	1.6	1.1	2.1
28APR80	268	268	0.58	1.2	0.78	1.1	0.31	1.4	0.32	0.95	0.15	2	0.49	1.9
29JUN80	330	330	1.1	2	1.5	2.2	1.2	2.2	0.93	1.9	0.35	2.3	0.79	3.6
11SEP80	404	404	0.51	1.9	0.98	1.8	0.76	1.1	0.57	1.5	0.48	0.66	0.89	2.6
26DEC80	510	510	<0.05	1.5	0.23	1.5	<0.05	1.4	<0.05	0.92	<0.05	0.67	<0.05	2.3
18JUN81	684	549	0.54	2.5	0.48	2.4	0.44	2.6	0.71	2.4	1.2	2.8	0.52	4.2
17JUL81	713	578	0.73	2.7	1.1	2.6	0.87	1.6	1	1.6	0.7	1.2	0.79	3.9
17AUG81	744	609	1.6	1.2	0.87	1.7	1.1	2	1.7	1.4	1	0.82	<0.25	3.4
17SEP81	775	640	<0.25	1.2	<0.25	1.2	<0.25	1.4	0.27	1.2		<0.25	<0.25	1.5
19OCT81	807	672	1.5	1.3	<0.25	2.1	0.91	0.99	<0.25	2.4	1	2.3	1.7	3

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= BARIUM

SAMPLE DATE	DAYS A	DAYS - 0	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.2	0.43	0.18	0.17	0.11	0.55	0.21	0.084	0.2	0.45	0.059	0.028
06AUG79	2	2	0.043	0.071	0.057	0.038	0.034	V	0.067	<0.001	0.045	0.059	0.057	<0.001
07AUG79	3	3	0.043	0.028	0.06	0.016	0.021	V	0.045	0.011	0.1	0.034	0.019	<0.001
08AUG79	4	4	V	0.018	0.067	0.01	V	V	0.12	<0.001	V	0.032	V	<0.001
11AUG79	7	7	0.052	0.0054	0.055	<0.001	0.0078	0.39	0.06	<0.001	0.021	0.048	0.038	<0.001
12AUG79	8	8	0.033	<0.001	0.051	<0.001	<0.001	0.17	0.04	<0.001	0.02	0.045	0.051	<0.001
14AUG79	10	10	0.021	0.0087	0.06	0.01	0.039	0.17	0.0068	<0.001	0.026	0.025	0.042	<0.001
16AUG79	12	12	0.016	<0.001	0.051	0.019	<0.001	0.094	0.04	<0.001	0.022	0.11	0.046	<0.001
19AUG79	15	15	0.043	0.027	0.04	<0.001	0.0066	0.063	0.037	<0.001	0.013	0.11	0.046	<0.001
24AUG79	20	20	0.016	0.0052	<0.001	<0.001	0.016	0.063	0.039	<0.001	0.028	0.098	0.034	<0.001
28AUG79	24	24	0.24	0.14	0.18	0.14	0.23	0.29	0.22	0.22	0.24	0.27	0.25	0.22
02SEP79	29	29	0.17	0.15	0.18	0.2	0.21	0.28	0.22	0.24	0.24	0.26	0.23	0.2
09SEP79	36	36	0.23	0.22	0.23	0.23	0.2	0.28	0.21	0.15	0.19	0.19	0.18	0.13
20SEP79	47	47	0.14	0.12	0.14	0.1	0.13	0.13	0.13	0.098	0.16	0.17	0.15	0.095
29SEP79	56	56	0.13	0.097	0.12	0.1	0.12	0.13	0.13	0.091	0.15	0.16	0.24	0.078
14OCT79	71	71	0.089	0.054	0.09	0.057	0.091	0.064	0.086	0.055	0.092	0.1	0.1	0.049
01NOV79	89	89	0.074	0.063	0.099	0.087	0.071	0.076	0.083	0.043	0.1	0.05	0.089	0.062
24NOV79	112	112	0.07	0.035	0.05	0.04	0.07	0.04	0.06	0.025	0.08	0.03	0.075	0.03
14DEC79	132	132	0.09	0.11	0.26	0.2	0.24	0.29	0.24	0.27	0.25	0.25	0.29	0.27
17JAN80	166	166	0.05	0.035	0.045	0.035	0.065	0.03	0.08	0.025	0.05	0.025	0.06	0.025
06MAR80	215	215	0.016	<.0006	<.0006	<.0006	0.049	0.014	0.03	<.0006	0.029	<.0006	<.0006	<.0006
28APR80	268	268	0.22	0.19	0.18	0.17	0.25	0.16	0.19	0.21	0.23	0.17	0.24	0.16
29JUN80	330	330	0.34	0.17	0.2	0.11	0.44	0.28	0.32	0.24	0.23	0.35	0.33	0.22
11SEP80	404	404	0.007	<0.001	0.03	.0010	0.03	0.07	0.05	<0.001	0.05	0.05	0.01	<0.001
26DEC80	510	510	0.022	0.008	0.025	0.01	0.025	0.006	0.023	0.004	0.029	0.018	0.025	<0.001
18JUN81	684	549	0.62	0.36	<0.005	0.6	0.57	0.8	0.6	0.38	0.59	<0.005	0.65	0.61
17JUL81	713	578	0.33	0.21	0.29	0.3	0.34	0.26	0.32	0.25	0.37	0.29	0.29	0.24
17AUG81	744	609	0.3	0.24	0.27	0.33	0.33	0.31	0.35	0.25	0.29	0.27	0.31	0.33
17SEP81	775	640	0.66	0.61	0.66	0.61	0.65	0.65	0.69	0.64	1.1	0.63	0.66	0.6
19OCT81	807	672	0.86	0.75	0.83	0.86	0.87	0.85	0.99	0.85	1.1	0.89	0.89	0.89

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= BERYLLIUM

SAMPLE DATE	DAYS A	DAYS O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	.	.	.	.	.	.	.	.	.	.	.	.
06AUG79	2	2	.	.	.	.	.	V	.	.	.	.	.	.
07AUG79	3	3	.	.	.	.	.	V	.	.	.	.	.	.
08AUG79	4	4	V	.	.	.	V	V	.	.	.	.	.	.
11AUG79	7	7	.	.	.	.	.	.	.	.	V	.	V	.
12AUG79	8	8	.	.	.	.	.	.	.	.	.	.	.	.
14AUG79	10	10	.	.	.	.	.	.	.	.	.	.	.	.
15AUG79	12	12	.	.	.	.	.	.	.	.	.	.	.	.
19AUG79	15	15	.	.	.	.	.	.	.	.	.	.	.	.
24AUG79	20	20	.	.	.	.	.	.	.	.	.	.	.	.
28AUG79	24	24	.	.	.	.	.	.	.	.	.	.	.	.
02SEP79	29	29	.	.	.	.	.	.	.	.	.	.	.	.
09SEP79	36	36	.	.	.	.	.	.	.	.	.	.	.	.
20SEP79	47	47	.	.	.	.	.	.	.	.	.	.	.	.
29SEP79	56	56	.	.	.	.	.	.	.	.	.	.	.	.
14OCT79	71	71	.	.	.	.	.	.	.	.	.	.	.	.
01NOV79	89	89	.	.	.	.	.	.	.	.	.	.	.	.
24NOV79	112	112	.	.	.	.	.	.	.	.	.	.	.	.
14DEC79	132	132	.	.	.	.	.	.	.	.	.	.	.	.
17JAN80	166	166	.	.	.	.	.	.	.	.	.	.	.	.
06MAR80	215	215	.	.	.	.	.	.	.	.	.	.	.	.
28APR80	268	268	.	.	.	.	.	.	.	.	.	.	.	.
29JUN80	330	330	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	.	.
11SEP80	404	404	0.003	0.007	0.007	0.005	0.004	<0.001	<0.001	0.006	<0.001	0.002	0.006	0.007
26DEC80	510	510	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
18JUN81	684	549	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
17JUL81	713	578	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
17AUG81	744	609	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	0.005	<0.002	<0.002	<0.002	0.003	<0.002
17SEP81	775	640	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
19OCT81	807	672	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETERS BORON

SAMPLE DATE	DAYS A	DAYS O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	17	0.76	20	2.9	22	1.2	21	6.4	9.2	0.44	18	1.7
06AUG79	2	2	24	0.31	13	2.4	18	V	24	11	8.3	0.078	14	2.6
07AUG79	3	3	22	0.27	12	1.7	21	V	20	7.2	5	0.038	11	2
08AUG79	4	4	V	0.14	9.7	1.4	V	V	19	6.6	V	0.12	V	1.6
11AUG79	7	7	15	0.17	8.4	1.6	16	0.28	15	8.7	4.8	<0.004	8.6	1.5
12AUG79	8	8	12	0.15	8.5	1.7	14	<0.004	11	9.8	3.6	<0.004	6.2	1.9
14AUG79	10	10	12	0.45	10	1.9	14	0.33	12	7.3	3.6	0.24	6.7	1.9
16AUG79	12	12	14	0.38	11	1.5	15	0.21	12	5.8	4.9	0.39	7.8	1.8
19AUG79	15	15	8.3	0.55	6.1	1.8	11	0.13	7.6	5.1	6.8	0.49	5	1.6
24AUG79	20	20	6.3	0.45	2.3	1.4	11	0.17	5.3	5.2	4.9	0.53	4.8	1.5
28AUG79	24	24	7.4	0.77	5.1	2.3	9.4	0.74	6.5	7.9	4.3	1.6	4.3	2.3
02SEP79	29	29	7.7	0.77	5.7	2.5	9.8	0.88	7.3	7	4.6	1.5	4.9	2.3
09SEP79	36	36	7.4	1.1	7.3	2.3	11	1	6.6	5.3	4.5	0.83	4.8	1.7
20SEP79	47	47	6.4	0.62	7	1.3	9.1	0.47	5	4.3	4.2	0.75	4	1.4
29SEP79	56	56	5.8	1.2	5.4	2.5	8.5	0.86	5.3	4	4.7	0.78	4.4	2.3
14OCT79	71	71	5	1.9	6.5	2.3	6.4	1.4	5	4.4	4.1	1.7	4.6	2
01NOV79	89	89	3.9	0.85	5.3	1.5	8.2	1.4	4.7	3.3	3.5	1.8	4.4	1.4
24NOV79	112	112	10	4.5	11	4.7	11	5.2	8.2	6.8	6.8	5.6	7.4	4.8
14DEC79	132	132	5.7	4.2	3.1	4.1	4.6	3.2	5.1	4.7	3.4	3.4	3.5	3.3
17JAN80	166	166	6	4	11	5.1	5.5	5.7	7	2	5.7	7.3	6.6	7.7
06MAR80	215	215	2.2	1.2	4.8	1.5	1.6	1.3	1.9	1.9	1.5	2.1	2.7	1.8
28APR80	268	268	3	1.8	3.6	2.4	1.3	2.6	2	2.6	0.81	3	2.9	3.1
29JUN80	330	330	5.3	4.5	6.7	5.1	4.9	5.2	5.3	6.7	2.9	5.3	4.4	6.5
11SEP80	404	404	3.8	4.6	5.8	4.9	5	2.4	4.1	5.7	3.6	2.2	5.3	5.1
26DEC80	510	510	1.8	0.11	2	0.45	0.54	0.79	2	0.88	1.2	0.46	1.8	<0.009
18JUN81	684	549	2.9	2.1	3.2	3.4	2.5	3.5	3.7	2.9	3.4	2.3	2.8	3.4
17JUL81	713	578	2.1	1.6	2.4	2.2	2.5	1.9	2.2	2.3	2.4	0.69	1.9	1.8
17AUG81	744	609	2.4	1.1	2.4	1.9	2.5	2.3	2.3	2.5	1.9	0.49	1.3	2.3
17SEP81	775	640	7.9	10	6.7	8.8	9.2	6.3	6.4	7.7		4.2	6.3	10
19OCT81	807	672	4.1	3.1	4.2	3.8	7.5	4	3.9	3.9	5.1	3.7	4	3.6

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= CADMIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.018	<0.005	<0.005	<0.005	0.026	<0.005	<0.005	<0.005	<0.005	<0.005	0.0054	<0.005
06AUG79	2	2	0.0066	<0.005	<0.005	<0.005	0.018	V	0.0055	<0.005	<0.005	<0.005	<0.005	<0.005
07AUG79	3	3	0.0064	<0.005	<0.005	<0.005	0.011	V	0.0066	<0.005	<0.005	<0.005	<0.005	<0.005
08AUG79	4	4	V	<0.005	<0.005	<0.005	V	V	<0.005	<0.005	V	<0.005	V	<0.005
11AUG79	7	7	<0.005	<0.005	<0.005	<0.005	0.0082	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
12AUG79	8	8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0055	<0.005	<0.005	<0.005
14AUG79	10	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
16AUG79	12	12	<0.005	<0.005	<0.005	<0.005	0.0067	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
19AUG79	15	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
24AUG79	20	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
28AUG79	24	24	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
02SEP79	29	29	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
09SEP79	36	36	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
20SEP79	47	47	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
29SEP79	56	56	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
14OCT79	71	71	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
01NOV79	89	89	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
24NOV79	112	112	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
14DEC79	132	132	<0.04	<0.04	0.18	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
17JAN80	166	166	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
06MAR80	215	215	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
28APR80	268	268	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
29JUN80	330	330	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
11SEP80	404	404	0.02	0.04	0.04	0.03	0.03	<0.008	<0.008	0.04	0.01	0.02	0.03	0.04
26DEC80	510	510	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
18JUN81	684	549	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
17JUL81	713	578	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042
17AUG81	744	609	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042
17SEP81	775	640	<0.042	<0.043	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042
19OCT81	807	672	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= CALCIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	280	260	350	660	280	190	320	530	340	130	340	470
06AUG79	2	2	240	800	330	670	330	V	250	390	140	37	360	470
07AUG79	3	3	220	730	390	590	290	V	160	460	200	33	260	480
08AUG79	4	4	V	700	410	530	V	V	200	460	V	38	V	460
11AUG79	7	7	360	710	440	510	320	210	280	450	200	27	360	470
12AUG79	8	8	340	700	460	520	310	230	320	420	230	30	440	460
14AUG79	10	10	350	710	430	510	310	370	310	440	250	60	430	470
16AUG79	12	12	360	680	390	490	310	410	310	440	250	60	380	470
19AUG79	15	15	410	640	440	480	360	420	380	440	260	75	448	480
24AUG79	20	20	430	600	350	460	350	470	420	420	330	95	450	470
28AUG79	24	24	460	660	500	530	430	670	500	490	430	360	560	520
02SEP79	29	29	448	660	470	520	400	650	430	490	420	370	530	510
09SEP79	36	36	460	650	460	510	400	590	430	480	440	180	520	500
20SEP79	47	47	420	650	440	500	410	520	400	460	420	180	500	480
29SEP79	56	56	410	560	460	450	320	510	390	430	390	170	470	430
140CT79	71	71	500	570	490	510	460	660	470	440	450	480	520	460
01NOV79	89	89	520	590	490	520	460	640	480	430	500	430	540	460
24NOV79	112	112	480	550	450	510	610	640	530	530	500	410	530	450
14DEC79	132	132	450	520	1600	490	510	610	460	470	430	430	510	430
17JAN80	166	166	520	540	470	440	590	610	480	470	500	420	480	510
06MAR80	215	215	440	520	460	470	650	610	470	450	520	420	470	440
28APR80	268	268	480	530	520	500	760	510	500	440	490	440	520	450
29JUN80	330	330	580	550	530	580	460	500	560	580	420	360	570	530
11SEP80	404	404	540	540	608	630	510	490	550	540	330	240	530	520
26DEC80	510	510	500	540	600	530	360	410	510	480	280	260	530	580
18JUN81	684	549	510	590	600	590	450	400	530	470	230	250	530	560
17JUL81	713	578	510	550	570	588	460	388	490	420	280	200	540	520
17AUG81	744	609	490	510	560	560	440	400	500	430	280	220	520	510
17SEP81	775	640	520	550	650	600	460	370	500	470		260	530	500
190CT81	807	672	588	560	700	650	450	400	670	500	410	340	550	600

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= CHLORIDES

SAMPLE DATE	DAYS A	DAYS D	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	•	E	320	160	490	E	•	320	•	130	•	•
06AUG79	2	2	250	120	180	160	350	V	290	270	•	•	•	•
07AUG79	3	3	160	100	120	170	310	V	190	340	•	•	•	•
08AUG79	4	4	V	•	E	170	V	V	E	E	V	E	V	•
11AUG79	7	7	210	130	99	150	240	120	220	360	•	18	•	•
12AUG79	8	8	180	140	95	140	150	48	160	270	•	21	•	•
14AUG79	10	10	170	120	130	130	170	62	150	300	•	37	•	•
16AUG79	12	12	E	120	E	140	150	140	150	320	•	36	•	•
19AUG79	15	15	170	130	94	130	160	150	99	350	•	39	•	•
24AUG79	20	20	•	•	•	•	•	•	•	•	•	•	•	•
28AUG79	24	24	•	•	•	•	•	•	•	•	•	•	•	•
02SEP79	29	29	•	•	•	•	•	•	•	•	•	•	•	•
09SEP79	36	36	•	•	•	•	•	•	•	•	•	•	•	•
20SEP79	47	47	•	•	•	•	•	•	•	•	•	•	•	•
29SEP79	56	56	•	•	•	•	•	•	•	•	•	•	•	•
14OCT79	71	71	•	•	•	•	•	•	•	•	•	•	•	•
01NOV79	89	89	•	•	•	•	•	•	•	•	•	•	•	•
24NOV79	112	112	•	•	•	•	•	•	•	•	•	•	•	•
14DEC79	132	132	•	•	I	•	•	•	•	•	•	•	•	•
17JAN80	166	166	•	•	•	•	•	•	•	•	•	•	•	•
06MAR80	215	215	•	•	•	•	•	•	•	•	•	•	•	•
28APR80	268	268	32	47	88	21	32	32	12	26	24	21	21	24
29JUN80	330	330	15	33	31	22	18	21	20	8.3	32	19	21	22
11SEP80	404	404	15	21	9.8	11	11	15	14	3	36	11	15	13
26DEC80	510	510	15	15	8.4	11	10	13	12	6.6	29	9.4	14	13
18JUN81	684	545	13	14	33	160	36	36	35	4	37	39	21	25
17JUL81	713	578	13	12	7.6	8.5	14	10	6	3.8	35	8.8	98	12
17AUG81	744	609	15	12	5.5	7.2	13	11	5.7	4.3	25	7.3	11	12
17SEP81	775	640	14	13	5.2	7.7	13	10	4	4	24	6.4	12	12
19OCT81	807	672	15	12	6.4	7.1	13	11	4.5	4.3		7.3	14	14

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS
I=INSUFFICIENT VOLUME FOR ALL ANALYSES--ICPES ONLY PERFORMED

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= CHROMIUM

SAMPLE DATE	DAYS A	DAYS O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.49	0.085	0.34	0.13	0.31	0.064	0.33	0.12	0.32	0.012	0.32	0.15
06AUG79	2	2	0.25	0.082	0.16	0.093	0.25	V	0.21	0.099	0.27	<0.005	0.088	0.13
07AUG79	3	3	0.15	0.074	0.096	0.067	0.15	V	0.056	0.07	0.14	<0.005	0.83	0.13
08AUG79	4	4	V	0.058	0.069	0.058	V	V	0.075	0.072	V	<0.005	V	0.12
11AUG79	7	7	0.066	0.073	0.067	0.068	0.098	0.017	0.059	0.07	0.088	<0.005	0.042	0.13
12AUG79	8	8	0.044	0.088	0.055	0.071	0.062	0.026	0.04	0.062	0.047	<0.005	0.039	0.13
14AUG79	10	10	0.053	0.063	0.053	0.057	0.093	0.042	0.041	0.057	0.02	0.0087	0.041	0.13
16AUG79	12	12	0.12	0.062	0.067	0.06	0.12	0.054	0.057	0.066	0.024	0.0061	0.055	0.12
19AUG79	15	15	0.079	0.069	0.093	0.068	0.098	0.058	0.082	0.068	0.021	0.0083	0.1	0.13
24AUG79	20	20	0.081	0.061	0.055	0.061	0.1	0.06	0.089	0.064	0.016	0.0062	0.098	0.12
28AUG79	24	24	0.063	0.085	0.064	0.076	0.05	0.092	0.11	0.08	0.031	0.067	0.13	0.13
02SEP79	29	29	0.059	0.083	0.055	0.083	0.057	0.088	0.083	0.092	0.028	0.074	0.098	0.14
09SEP79	36	36	0.098	0.086	0.091	0.083	0.11	0.084	0.11	0.092	0.048	0.035	0.11	0.14
20SEP79	47	47	0.082	0.065	0.086	0.066	0.1	0.066	0.086	0.07	0.027	0.027	0.12	0.1
29SEP79	56	56	0.068	0.065	0.07	0.064	0.085	0.06	0.064	0.065	0.035	0.025	0.095	0.091
10OCT79	71	71	0.042	0.07	0.058	0.072	0.068	0.079	0.013	0.054	0.025	0.06	0.053	0.11
01NOV79	89	89	0.061	0.062	0.081	0.074	0.057	0.088	0.024	0.23	0.024	0.08	0.049	0.12
24NOV79	112	112	0.045	0.01	<0.005	0.027	0.014	0.04	0.04	0.01	0.014	0.019	0.046	0.024
14DEC79	132	132	0.1	0.021	0.44	0.014	0.015	0.012	0.01	0.011	<0.005	<0.005	<0.005	<0.005
17JAN80	165	166	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
06MAR80	215	215	0.022	0.029	0.04	0.03	0.026	0.039	0.03	0.052	0.069	0.066	0.079	0.1
28APR80	268	268	0.011	0.014	0.014	0.014	0.016	0.014	0.012	0.009	0.015	0.022	0.005	0.021
29JUN80	330	330	0.054	0.082	0.077	0.072	0.051	0.048	0.043	0.085	0.028	0.056	0.013	0.08
11SEP80	404	404	0.07	0.12	0.12	0.11	0.1	0.01	0.07	0.11	0.07	0.06	0.1	0.13
26DEC80	510	510	<0.001	0.02	0.018	0.022	0.026	0.025	<0.001	0.019	0.016	0.013	0.009	0.034
18JUN81	684	549	0.057	0.12	0.056	0.14	0.096	0.15	0.095	0.15	0.077	0.24	0.11	0.23
17JUL81	713	578	0.032	<0.005	0.049	0.03	0.006	<0.005	0.02	<0.005	0.018	<0.005	0.02	0.029
17AUG81	744	609	0.08	<0.005	<0.005	<0.005	0.04	0.038	0.066	<0.005	0.032	<0.005	<0.005	0.03
17SEP81	775	640	<0.005	<0.005	<0.005	<0.005	<0.005	0.039	0.024	0.017		<0.005	<0.005	<0.005
19OCT81	807	672	<0.005	<0.005	<0.005	0.017	0.033	<0.005	<0.005	<0.005	0.022	0.057	<0.005	<0.005

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= COBALT

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.22	0.28	0.16	0.21	0.18	<0.15	<0.15	0.22	0.24	<0.15	0.18	1.1
06AUG79	2	2	<0.15	0.48	0.3	0.55	0.3	V	<0.15	0.27	<0.15	<0.15	0.17	0.67
07AUG79	3	3	<0.15	0.43	0.31	0.31	0.21	V	<0.15	0.22	0.16	<0.15	<0.15	0.64
08AUG79	4	4	V	0.24	0.22	0.2	V	V	0.17	0.22	V	<0.15	V	0.51
11AUG79	7	7	0.24	0.45	0.39	0.34	0.23	<0.15	<0.15	0.22	0.17	<0.15	0.17	0.64
12AUG79	8	8	0.28	0.65	0.39	0.39	0.32	<0.15	0.25	0.27	0.25	<0.15	0.23	0.61
14AUG79	10	10	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.4
16AUG79	12	12	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.32
19AUG79	15	15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.4
24AUG79	20	20	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.29
28AUG79	24	24	0.18	0.22	0.25	0.19	0.25	0.25	0.2	0.19	0.29	0.17	0.27	0.39
02SEP79	29	29	0.19	0.25	0.24	0.25	0.28	0.22	0.22	0.28	0.26	0.18	0.24	0.43
09SEP79	36	36	0.27	0.25	0.26	0.2	0.23	<0.15	0.19	0.19	0.26	<0.15	0.24	0.36
20SEP79	47	47	<0.15	<0.15	0.17	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.2
29SEP79	56	56	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.15
14OCT79	71	71	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
01NOV79	89	89	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
24NOV79	112	112	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
14DEC79	132	132	<0.03	<0.03	0.27	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
17JAN80	166	166	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.036
06MAR80	215	215	<0.012	<0.012	0.021	<0.012	<0.012	<0.012	<0.012	0.03	0.023	0.071	0.042	0.065
28APR80	268	268	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.007	<0.006	0.036	<0.006	<0.006
29JUN80	330	330	0.038	0.053	0.039	0.044	0.028	0.029	0.035	0.067	0.018	0.047	<0.018	0.064
11SEP80	404	404	0.04	0.08	0.07	0.06	0.06	<0.011	<0.011	0.07	0.01	0.05	0.06	0.08
26DEC80	510	510	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
18JUN81	684	549	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
17JUL81	713	578	<0.03	<0.03	<0.03	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
17AUG81	744	609	<0.03	<0.03	<0.03	<0.03	0.037	<0.03	0.041	<0.03	<0.03	<0.03	<0.03	<0.03
17SEP81	775	640	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03		<0.03	<0.03	<0.03
19OCT81	807	672	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= CONDUCTIVITY

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	38000	E	22000	6700	47000	E	28000	22000	30000	.	40000	12000
06AUG79	2	2	20000	5300	15000	8400	37000	V	25000	22000	18000	330	11000	9500
07AUG79	3	3	18000	4900	60000	7200	28000	V	14000	14000	12000	290	8000	8800
08AUG79	4	4	V	4900	E	7300	V	V	E	E	V	E	V	8300
11AUG79	7	7	18000	5100	11000	7500	24000	1600	15000	14000	13000	250	9400	8000
12AUG79	8	8	14000	5000	9600	6900	14000	1500	10000	11000	11000	270	10000	8500
14AUG79	10	10	14000	5200	13000	7500	16000	2100	12000	12000	9500	570	8900	8000
16AUG79	12	12	E	5100	E	7200	28000	2400	12000	12000	11000	590	9500	7500
19AUG79	15	15	15000	5900	11000	7000	15000	2500	14000	18000	11000	820	10000	7500
24AUG79	20	20	14000	6000	11000	7100	15000	3300	13000	14000	12000	1300	8500	7500
28AUG79	24	24	14000	6900	7400	7900	11000	4200	13000	13000	11000	4200	11000	7900
02SEP79	29	29	11000	6300	7800	7600	10000	4200	10000	13000	11000	5300	9200	7500
09SEP79	36	36	12000	6500	10000	7900	13000	3600	12000	.	11000	2200	9700	7300
20SEP79	47	47	9800	6000	11000	7300	14000	3900	10000	12000	11000	2400	11000	7000
29SEP79	56	56	9500	6800	7800	7600	13000	3900	8400	10000	9000	2300	9200	7500
14OCT79	71	71	5700	6100	7300	6000	7100	4500	4700	6800	5500	5300	5400	6500
01NOV79	89	89	4400	4400	7900	5800	7000	4000	5200	7000	5900	5400	5200	6800
24NOV79	112	112	6200	5200	8700	5400	6400	4000	4900	7500	5600	6000	5700	5900
14DEC79	132	132	4200	5300	I	5300	4000	4400	4000	7800	4000	6000	4400	6300
17JAN80	166	166	4500	4400	8900	4700	4000	4400	3100	6000	3000	5200	3800	5600
06MAR80	215	215	3400	4800	7000	4800	5200	4400	2600	6000	3500	5400	3500	5300
28APR80	268	268	3500	3900	3900	3700	4600	3900	2500	4300	3300	3900	2700	4500
29JUN80	330	330	3200	4200	4600	4100	2500	3200	2700	3500	3200	3000	2600	4200
11SEP80	404	404	2700	4100	2700	3600	2300	2900	2900	3100	4100	2400	2700	4100
26DEC80	510	510	2400	3800	2500	3300	1800	2500	2600	2600	3300	2200	2400	3800
18JUN81	684	549	2400	4000	2300	3300	2000	2300	2400	2500	4300	2300	2200	3600
17JUL81	713	578	2300	4100	2500	3400	2400	2400	2400	2500	4800	2100	2500	3900
17AUG81	744	609	2600	4000	2300	3100	2400	2400	2400	2600	3500	2100	2400	3900
17SEP81	775	640	3000	4700	2500	3800	2600	2400	2500	2900		2200	2800	4300
19OCT81	807	672	2900	4400	2600	3800	2600	2400	2600	2900	3500	2100	2900	4300

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS
I=INSUFFICIENT VOLUME FOR ALL ANALYSES--ICPES ONLY PERFORMED

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER: COPPER

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.018	<0.005	<0.005	0.0074	0.019	<0.005	0.01	0.0068	0.015	<0.005	0.012	0.021
06AUG79	2	2	0.0052	0.018	0.0098	0.044	0.039	V	0.011	0.017	0.015	<0.005	<0.005	0.0091
07AUG79	3	3	<0.005	0.015	0.006	0.015	0.0077	V	<0.005	0.0062	0.013	<0.005	<0.005	0.01
08AUG79	4	4	V	0.0086	0.006	0.012	V	V	<0.005	0.0059	V	<0.005	V	0.0065
11AUG79	7	7	<0.005	0.021	0.013	0.019	0.0054	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	0.0096
12AUG79	8	8	<0.005	0.027	0.0083	0.02	0.0062	<0.005	<0.005	0.0072	0.0055	<0.005	<0.005	0.0081
14AUG79	10	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
16AUG79	12	12	0.0085	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
19AUG79	15	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
24AUG79	20	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
28AUG79	24	24	<0.005	0.0052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
02SEP79	29	29	<0.005	<0.005	<0.005	<0.005	<0.005	0.0058	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
09SEP79	36	36	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
20SEP79	47	47	0.0077	<0.005	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
29SEP79	56	56	<0.005	<0.005	<0.005	<0.005	<0.005	0.0051	<0.005	<0.005	<0.005	0.012	<0.005	<0.005
14OCT79	71	71	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0087	<0.005	<0.005
01NOV79	89	89	<0.005	<0.005	0.015	<0.005	<0.005	0.0063	<0.005	<0.005	<0.005	0.012	<0.005	<0.005
24NOV79	112	112	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.029	<0.005	<0.005
14DEC79	132	132	0.058	0.064	0.037	0.011	0.05	0.016	<0.005	<0.005	<0.005	0.014	0.035	0.058
17JAN80	166	166	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
06MAR80	215	215	0.0056	0.0085	0.021	0.012	0.019	0.015	0.017	0.031	0.04	0.057	0.053	0.07
28APR80	268	268	0.004	0.003	.0010	<0.001	0.029	<0.001	0.002	<0.001	0.019	0.024	<0.001	<0.001
29JUN80	330	330	0.066	0.077	0.075	0.083	0.038	0.025	0.057	0.12	0.021	0.069	0.085	0.092
11SEP80	404	404	0.06	0.11	0.12	0.1	0.1	<0.001	0.02	0.1	0.03	0.04	0.1	0.13
26DEC80	510	510	<0.001	0.024	0.033	0.028	0.045	0.032	0.023	0.029	0.03	0.039	0.023	0.028
18JUN81	684	549	0.027	<0.005	<0.005	0.03	0.035	0.038	0.028	0.06	0.02	0.18	<0.005	0.15
17JUL81	713	578	<0.005	<0.005	0.025	<0.005	<0.005	<0.005	0.009	<0.005	0.064	0.084	<0.005	<0.005
17AUG81	744	609	0.14	<0.005	<0.005	0.017	0.12	0.083	0.17	<0.005	0.051	<0.005	<0.005	0.039
17SEP81	775	640	<0.005	<0.005	<0.005	<0.005	<0.005	0.056	0.016	0.011		<0.005	<0.005	<0.005
19OCT81	807	672	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS.

PARAMETER= FLUORIDES

SAMPLE DATE	DAYS A - C	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.5	E	0.36	0.23	0.64	E	0.48	2.4	0.63	0.28	0.89	0.39
06AUG79	2	2	0.5	0.17	0.35	0.18	0.53	V	0.31	2.6	0.52	0.06	0.23	0.35
07AUG79	3	3	0.34	0.13	0.29	0.16	0.46	V	0.33	1.6	0.34	0.14	0.22	0.37
08AUG79	4	4	V	0.13	E	0.26	V	V	E	E	V	E	V	0.37
11AUG79	7	7	0.32	0.15	0.21	0.19	0.26	0.41	0.33	1.6	0.41	0.06	0.19	0.31
12AUG79	8	8	0.25	0.2	0.38	0.17	0.2	0.37	0.31	2	0.3	0.05	0.26	0.27
14AUG79	10	10	0.26	0.21	0.29	0.22	0.25	0.33	0.29	1.6	0.2	0.05	0.19	0.37
16AUG79	12	12	E	0.3	E	0.23	0.26	0.41	0.35	1.6	0.28	0.16	0.25	0.43
19AUG79	15	15	0.29	0.23	0.24	0.27	0.19	0.41	0.2	1.6	0.29	0.7	0.31	0.45
24AUG79	20	20	0.3	0.23	0.22	0.23	0.19	0.35	0.31	1.7	0.22	0.16	0.31	0.45
28AUG79	24	24	0.2	0.15	0.12	0.2	0.14	0.4	0.33	1.5	0.24	0.32	0.3	0.39
02SEP79	29	29	0.27	0.18	0.49	0.21	0.13	0.39	0.25	1.8	0.2	0.34	0.2	0.41
09SEP79	36	36	0.15	0.17	0.23	0.22	0.19	0.36	0.28	1.5	0.16	0.17	0.28	0.28
20SEP79	47	47	0.3	0.18	0.25	0.2	0.21	0.3	0.28	1.7	0.22	0.2	0.29	0.39
29SEP79	56	56	0.2	0.16	0.2	0.17	0.36	0.27	0.24	1.6	0.24	0.2	0.24	0.45
140CT79	71	71	0.21	0.23	0.29	0.24	0.25	0.45	0.29	1.3	0.21	0.24	0.23	0.4
01NOV79	89	89	0.5	0.2	0.59	0.16	0.09	0.41	0.28	1.8	0.19	0.45	0.22	0.42
24NOV79	112	112	0.21	0.19	0.24	0.07	0.17	0.39	0.2	1.4	0.15	0.24	0.17	0.32
14DEC79	132	132	0.23	0.17	I	0.15	0.09	0.44	0.22	1.4	0.33	0.22	0.15	0.31
17JAN80	166	166	0.14	0.18	0.18	0.19	0.11	0.39	0.18	1.4	0.17	0.16	0.14	0.23
06MAR80	215	215	0.15	0.16	0.17	0.2	0.18	0.38	0.21	1.3	0.13	0.17	0.2	0.31
28APR80	268	268	0.3	0.29	0.25	0.21	0.09	0.37	0.23	1	0.14	0.27	0.27	0.35
29JUN80	330	330	0.15	0.17	0.22	0.18	0.09	0.34	0.36	0.88	0.31	0.23	0.24	0.33
11SEP80	404	404	0.31	0.34	0.19	0.33	0.26	1.8	0.37	1	0.37	0.4	0.4	0.69
26DEC80	510	510	0.18	0.22	0.27	0.27	0.13	0.48	0.26	1.1	0.22	0.21	0.16	0.17
18JUN81	684	549	0.22	0.27	0.28	0.17	0.11	0.41	0.25	1.1	0.27	0.16	0.18	0.28
17JUL81	713	578	0.25	0.21	0.31	0.24	0.14	0.38	0.23	1.1	0.25	0.19	0.16	0.25
17AUG81	744	609	0.16	0.2	0.22	0.17	0.11	0.4	0.14	1	0.25	0.17	0.13	0.34
17SEP81	775	640	0.25	0.24	0.27	0.22	0.15	0.38	0.26	1		0.22	0.19	0.39
190CT81	807	672	0.16	0.22	0.22	0.22	0.1	0.37	0.21	1.1	0.23	0.18	0.16	0.25

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I=INSUFFICIENT VOLUME FOR ALL ANALYSES--ICPES ONLY PERFORMED

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= IRON

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.073	0.019	0.022	0.035	0.067	0.0044	0.028	0.038	0.013	<0.004	0.037	0.2
06AUG79	2	2	0.026	0.041	0.036	0.041	0.063	V	0.029	0.042	0.01	0.13	0.036	0.12
07AUG79	3	3	0.031	0.075	0.013	0.047	0.067	V	0.037	0.13	<0.004	0.13	0.017	0.11
08AUG79	4	4	V	0.087	0.16	0.068	V	V	0.0065	0.034	V	0.13	V	0.061
11AUG79	7	7	0.028	0.032	0.033	0.03	0.026	0.02	0.4	0.03	0.0098	0.18	0.016	0.057
12AUG79	8	8	0.029	0.037	0.024	0.024	0.024	0.0043	0.63	0.027	0.0074	0.14	0.033	0.061
14AUG79	10	10	0.03	0.018	0.027	0.036	0.033	0.023	1.2	0.022	0.012	0.13	0.056	0.049
16AUG79	12	12	0.038	0.023	0.026	0.025	0.039	0.023	0.71	0.021	0.01	0.13	0.044	0.053
19AUG79	15	15	0.037	0.027	0.028	0.031	0.037	0.023	0.12	0.021	0.013	0.095	0.23	0.054
24AUG79	20	20	0.035	0.021	0.02	0.022	0.037	0.024	0.12	0.029	0.015	0.052	0.045	0.056
28AUG79	24	24	0.021	0.022	0.016	0.027	0.015	0.02	0.2	0.023	0.016	0.034	0.056	0.042
02SEP79	29	29	0.026	0.024	0.015	0.023	0.023	0.034	0.21	0.019	0.012	0.02	0.037	0.044
09SEP79	36	36	0.037	0.026	0.029	0.022	0.024	0.046	0.31	0.025	0.015	0.018	0.04	0.042
20SEP79	47	47	0.039	0.033	0.042	0.03	0.04	0.035	0.12	0.032	0.019	0.036	0.25	0.043
29SEP79	56	56	0.029	0.02	0.025	0.021	0.03	0.018	0.074	0.022	0.027	0.021	0.63	0.033
14OCT79	71	71	0.12	0.038	0.091	0.2	0.029	0.028	0.055	0.02	0.031	0.13	0.94	0.083
01NOV79	89	89	0.048	0.065	0.19	0.063	0.042	0.094	0.071	0.79	0.042	0.18	0.12	0.046
24NOV79	112	112	0.43	0.17	0.58	0.12	0.19	0.13	0.13	0.11	0.096	0.11	0.15	0.12
14DEC79	132	132	0.32	0.1	0.17	0.09	0.09	0.07	0.07	0.07	0.085	0.085	0.07	0.048
17JAN80	166	166	<0.04	0.042	0.042	0.076	0.044	0.045	0.051	<0.04	0.042	0.056	0.056	0.072
06MAR80	215	215	0.024	0.03	0.03	0.022	0.031	0.025	0.021	0.034	0.029	0.042	0.046	0.055
28APR80	268	268	0.008	0.013	0.008	0.01	0.14	0.01	0.008	0.01	<0.008	0.021	<0.008	0.012
29JUN80	330	330	<0.023	<0.023	<0.023	0.21	0.11	0.035	0.039	<0.023	<0.023	<0.023	<0.023	<0.023
11SEP80	404	404	0.12	0.06	0.05	0.04	0.07	<0.008	0.03	0.04	0.03	<0.008	0.04	0.05
26DEC80	510	510	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
18JUN81	684	549	0.091	<0.04	<0.04	<0.04	0.862	<0.04	<0.04	<0.04	<0.04	0.055	<0.04	0.11
17JUL81	713	578	0.08	0.042	0.051	0.053	<0.038	<0.038	<0.038	<0.038	0.06	<0.038	<0.038	0.045
17AUG81	744	609	0.13	<0.038	0.072	0.1	0.22	0.1	0.09	0.04	0.072	<0.038	<0.038	0.071
17SEP81	775	640	<0.038	<0.038	<0.038	<0.038	<0.038	0.048	0.043	<0.038		<0.038	<0.038	<0.038
19OCT81	807	672	<0.04	<0.04	<0.04	0.071	<0.04	<0.04	<0.04	<0.04	0.07	0.053	<0.04	<0.04

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= LITHIUM

SAMPLE DATE	DAYS A	DAYS D	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	.	.	.	.	.	.	.	.	.	.	.	.
06AUG79	2	2	.	.	.	.	.	V	.	.	.	.	.	.
07AUG79	3	3	.	.	.	.	.	V	.	.	.	.	.	.
08AUG79	4	4	V	.	.	.	V	V	.	.	.	.	.	.
11AUG79	7	7	.	.	.	.	.	.	.	.	V	.	V	.
12AUG79	8	8	.	.	.	.	.	.	.	.	.	.	.	.
14AUG79	10	10	.	.	.	.	.	.	.	.	.	.	.	.
16AUG79	12	12	.	.	.	.	.	.	.	.	.	.	.	.
19AUG79	15	15	.	.	.	.	.	.	.	.	.	.	.	.
24AUG79	20	20	.	.	.	.	.	.	.	.	.	.	.	.
28AUG79	24	24	.	.	.	.	.	.	.	.	.	.	.	.
02SEP79	29	29	.	.	.	.	.	.	.	.	.	.	.	.
09SEP79	36	36	.	.	.	.	.	.	.	.	.	.	.	.
20SEP79	47	47	.	.	.	.	.	.	.	.	.	.	.	.
29SEP79	56	56	.	.	.	.	.	.	.	.	.	.	.	.
14OCT79	71	71	.	.	.	.	.	.	.	.	.	.	.	.
01NOV79	89	89	.	.	.	.	.	.	.	.	.	.	.	.
24NOV79	112	112	1.3	0.059	1.5	0.28	2.1	0.41	0.41	1.8	1.8	0.028	1.6	1.5
14DEC79	132	132	0.94	0.15	.	0.34	0.97	0.43	0.78	1.6	0.95	0.95	1.1	1.6
17JAN80	166	166	0.86	0.16	1.5	0.28	0.54	0.29	0.56	1.3	0.78	0.12	0.88	1.5
06MAR80	215	215	.	.	.	.	.	.	.	.	.	.	.	.
28APR80	268	268	0.61	0.15	0.47	0.2	0.5	0.45	0.35	0.76	0.94	0.011	0.71	1
29JUN80	330	330	0.56	0.19	0.56	0.25	0.52	0.46	0.67	0.62	1.2	0.048	0.62	0.9
11SEP80	404	404	0.38	0.18	0.27	0.23	0.43	0.3	0.51	0.3	1.5	0.06	0.56	0.64
26DEC80	510	510	0.23	0.053	0.12	0.078	0.22	0.19	0.34	0.2	1	<0.001	0.37	0.54
18JUN81	684	549	0.26	0.11	0.12	0.18	0.23	0.17	0.3	0.21	1.5	0.12	0.27	0.6
17JUL81	713	578	0.27	0.025	0.13	0.14	0.43	0.14	0.26	0.15	1.6	<0.002	0.35	0.54
17AUG81	744	609	0.37	<0.002	0.027	0.092	0.44	0.2	0.38	0.11	0.99	<0.002	0.21	0.51
17SEP81	775	640	0.28	<0.002	<0.002	0.025	0.38	0.16	0.17	0.2		<0.002	0.22	0.42
19OCT81	807	672	0.15	<0.002	<0.002	0.05	0.4	0.858	0.079	0.14	1.2	0.017	0.27	0.43

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER: MAGNESIUM

SAMPLE DATE	DAYS A - O		CELL 1 (SHALE)		CELL 2 (SHALE)		CELL 3 (TILE)		CELL 4 (LIMESTONE)		CELL 5 (ALLUVIUM)		CELL 6 (SANDSTONE)	
			U	L	U	L	U	L	U	L	U	L	U	L
04AUG79	0	0	578	22	220	390	750	16	390	410	3	0.84	460	500
06AUG79	2	2	270	180	140	200	660	V	300	300	1.6	6.5	83	390
07AUG79	3	3	150	170	150	190	390	V	110	230	0.39	6.4	52	390
08AUG79	4	4	V	160	150	170	V	V	21	230	V	11	V	370
11AUG79	7	7	120	160	130	170	280	44	190	210	2.6	5.1	120	380
12AUG79	8	8	74	170	95	180	130	76	78	160	2.6	5.8	78	360
14AUG79	10	10	120	150	110	140	200	110	98	140	2.1	12	92	240
16AUG79	12	12	230	140	130	140	250	120	130	150	4.9	12	120	240
19AUG79	15	15	170	140	200	140	200	130	180	150	11	15	220	240
24AUG79	20	20	170	140	110	140	220	140	200	150	22	21	210	230
28AUG79	24	24	16	24	15	22	10	26	35	23	3.5	17	46	40
02SEP79	29	29	14	22	11	22	11	25	23	26	2.7	20	28	41
09SEP79	36	36	26	23	22	22	32	23	34	25	6.7	6.2	36	40
20SEP79	47	47	290	220	280	220	410	220	340	260	53	69	540	400
29SEP79	56	56	230	220	230	220	350	220	230	230	67	62	390	330
140CT79	71	71	110	220	150	230	200	290	30	160	35	150	130	350
01NOV79	89	89	180	220	190	230	160	280	44	210	40	140	130	390
24NOV79	112	112	220	200	270	220	160	280	150	210	150	140	420	400
14DEC79	132	132	94	180	210	210	36	270	63	230	51	140	180	350
17JAN80	166	166	110	190	300	210	23	280	20	140	17	130	150	370
06MAR80	215	215	49	190	220	190	11	270	8	180	9.7	140	130	330
28APR80	268	268	2.5	0.049	8	0.026	0.006	0.037	0.21	0.11	<0.001	6.8	0.37	1.3
29JUN80	330	330	31	150	100	150	37	190	9.9	99	8.6	68	22	270
11SEP80	404	404	6.6	140	16	150	17	160	5.1	94	1.4	28	20	250
26DEC80	510	510	1.4	200	27	180	0.38	160	4.7	110	1.3	24	13	370
18JUN81	684	549	3.4	250	19	170	2.7	140	7	120	1.7	23	6	260
17JUL81	713	578	2.3	260	15	220	1.1	150	7.6	110	2	22	11	320
17AUG81	744	609	3.2	250	7.3	140	1.9	150	11	120	0.81	18	5.9	320
17SEP81	775	640	9.6	280	4.6	190	5.5	120	8.5	130		21	16	300
190CT81	807	672	3.3	290	11	250	9.7	140	9.3	130	0.67	28	28	370

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER: MANGANESE

SAMPLE DATE	DAYS A	DAYS O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.79	13	0.31	2.9	0.37	2.7	0.11	0.92	0.004	2	0.69	34
06AUG79	2	2	0.93	2.5	0.64	2.2	0.92	V	0.15	0.43	0.026	0.95	0.022	28
07AUG79	3	3	0.42	2.3	0.69	2.3	0.55	V	0.026	1.1	<0.001	0.85	0.0041	29
08AUG79	4	4	V	2.2	0.92	2.2	V	V	0.02	0.91	V	0.94	V	27
11AUG79	7	7	0.85	2	0.87	2	0.56	2.7	0.3	0.84	<0.001	0.84	0.1	27
12AUG79	8	8	0.5	1.6	0.99	1.7	0.23	1.2	0.28	0.33	0.002	0.91	0.18	21
14AUG79	10	10	1.2	1.8	2.5	1.7	1.1	0.87	0.63	0.55	<0.001	1.6	0.45	22
16AUG79	12	12	4.2	1.8	4.3	1.5	2.2	0.93	1	0.87	<0.001	1.6	0.6	22
19AUG79	15	15	1.6	1.6	1.6	1.1	1.7	1	0.68	1.1	0.022	2	0.67	22
24AUG79	20	20	2.2	1.3	1.6	0.93	2.7	0.99	0.78	1.3	0.36	2.5	1.1	20
28AUG79	24	24	0.9	0.83	0.5	0.35	0.5	0.46	0.87	0.65	0.92	4	0.81	16
02SEP79	29	29	1.9	0.5	1.6	0.28	0.57	0.77	0.94	0.44	1.1	5.8	0.82	17
09SEP79	36	36	3.6	0.51	6.3	0.31	3.2	1	1	0.93	2.1	3.6	1.2	16
20SEP79	47	47	4.4	0.48	10	0.61	3.8	0.7	0.92	0.81	3.3	3.8	1.4	15
29SEP79	56	56	3.4	0.2	5.1	0.15	4.3	0.48	0.66	0.68	2.7	4.1	0.93	9.7
14OCT79	71	71	2.5	0.25	10	0.2	3.4	0.3	0.5	0.24	0.76	12	043	9.5
01NOV79	89	89	4	0.3	12	0.26	2.9	0.26	1.1	0.45	1.2	12	0.59	11
24NOV79	112	112	5.8	0.062	23	0.047	5.9	0.098	0.098	0.39	1.4	11	0.83	9.1
14DEC79	132	132	1.3	0.015	0.21	<0.006	1.1	0.062	0.51	0.3	0.47	0.47	0.38	5.6
17JAN80	166	166	3.7	<0.006	3	<0.006	0.46	0.018	0.34	0.17	0.13	9.1	0.44	7
06MAR80	215	215	1	0.018	15	0.016	0.28	0.057	0.28	0.19	0.092	8.3	0.25	2.5
28APR80	268	268	0.13	<0.002	0.063	0.003	0.24	0.013	0.11	0.22	0.18	0.008	0.13	0.01
29JUN80	330	330	1.3	0.038	7.3	0.15	0.28	0.14	0.25	0.24	0.033	4	0.54	0.22
11SEP80	404	404	0.2	0.05	0.5	0.04	0.18	0.05	0.18	0.13	0.02	2.5	0.17	0.06
26DEC80	510	510	0.049	0.018	0.14	0.02	0.05	0.006	0.11	0.029	0.079	1.8	0.13	0.016
18JUN81	684	549	<0.006	0.017	0.13	<0.006	<0.006	<0.006	0.018	<0.006	0.11	1.5	0.023	<0.006
17JUL81	713	578	<0.006	<0.006	0.02	<0.006	<0.006	<0.006	0.01	<0.006	0.025	1.3	0.029	<0.006
17AUG81	744	609	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.094	<0.006	<0.006	1.2	0.058	<0.006
17SEP81	775	640	<0.006	0.006	<0.006	0.007	<0.006	<0.006	0.028	<0.006		1.4	0.036	<0.006
19OCT81	807	672	0.19	<0.006	0.015	0.009	0.025	<0.006	0.04	0.19	0.029	2	0.21	0.19

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= MERCURY

SAMPLE DATE	DAYS A	DAYS D	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	<0.001	.	<0.001	<0.001	<0.001	.	<0.001	<0.001	<0.001	.	<0.001	<0.001
06AUG79	2	2	<0.001	<0.001	<0.001	<0.001	<0.001	V	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
07AUG79	3	3	<0.001	<0.001	<0.001	<0.001	<0.001	V	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
08AUG79	4	4	V	<0.001	<0.001	<0.001	V	V	.	<0.001	V	<0.001	V	<0.001
11AUG79	7	7	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12AUG79	8	8	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
14AUG79	10	10	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
16AUG79	12	12	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19AUG79	15	15	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
24AUG79	20	20	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
28AUG79	24	24	D	D	D	D	D	D	D	D	D	D	D	D
02SEP79	29	29	D	D	D	D	D	D	D	D	D	D	D	D
09SEP79	36	36	D	D	D	D	D	D	D	D	D	D	D	D
20SEP79	47	47	D	D	D	D	D	D	D	D	D	D	D	D
29SEP79	56	56	D	D	D	D	D	D	D	D	D	D	D	D
14OCT79	71	71	D	D	D	D	D	D	D	D	D	D	D	D
01NOV79	89	89	D	D	D	D	D	D	D	D	D	D	D	D
24NOV79	112	112	D	D	D	D	D	D	D	D	D	D	D	D
14DEC79	132	132	D	D	I	D	D	D	D	D	D	D	D	D
17JAN80	166	166	D	D	D	D	D	D	D	D	D	D	D	D
06MAR80	215	215	D	D	D	D	D	D	D	D	D	D	D	D
28APR80	268	268	D	D	D	D	D	D	D	D	D	D	D	D
29JUN80	330	330	D	D	D	D	D	D	D	D	D	D	D	D
11SEP80	404	404	D	D	D	D	D	D	D	D	D	D	D	D
26DEC80	510	510	D	D	D	D	D	D	D	D	D	D	D	D
18JUN81	684	549	D	D	D	D	D	D	D	D	D	D	D	D
17JUL81	713	578	D	D	D	D	D	D	D	D	D	D	D	D
17AUG81	744	609	D	D	D	D	D	D	D	D	D	D	D	D
17SEP81	775	640	D	D	D	D	D	D	D	D	D	D	D	D
19OCT81	807	672	D	D	D	D	D	D	D	D	D	D	D	D

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS
I=INSUFFICIENT VOLUME FOR ALL ANALYSES--ICPES ONLY PERFORMED
D=DISCONTINUED AFTER DL REACHED

PARAMETER= MOLYBDENUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	1.9	0.11	1.4	0.31	2.1	0.18	1.7	1.4	2.3	0.076	1.3	0.17
06AUG79	2	2	1.9	0.31	0.72	0.39	1.7	V	1.5	1.4	1.5	<0.04	0.8	0.22
07AUG79	3	3	1	0.27	0.54	0.18	1.4	V	0.92	1	0.88	<0.04	0.43	0.21
08AUG79	4	4	V	0.13	0.39	0.12	V	V	0.9	1.1	V	<0.04	V	0.14
11AUG79	7	7	0.62	0.28	0.46	0.21	0.79	<0.04	0.6	1.1	0.62	<0.04	0.34	0.25
12AUG79	8	8	0.52	0.42	0.4	0.24	0.6	<0.04	0.49	0.89	0.46	<0.04	0.3	0.27
14AUG79	10	10	0.37	<0.04	0.3	<0.04	0.57	<0.04	0.36	0.72	0.29	<0.04	0.2	0.14
16AUG79	12	12	0.61	0.053	0.4	<0.04	0.7	<0.04	0.43	0.8	0.31	<0.04	0.28	0.099
19AUG79	15	15	0.34	0.046	0.24	0.074	0.48	0.055	0.32	0.84	0.3	<0.04	0.26	0.15
24AUG79	20	20	0.24	<0.04	0.1	<0.04	0.45	<0.04	0.24	0.8	0.18	<0.04	0.24	0.11
28AUG79	24	24	0.33	0.16	0.31	0.13	0.38	0.22	0.43	0.86	0.34	0.16	0.39	0.2
02SEP79	29	29	0.33	0.19	0.31	0.2	0.47	0.17	0.44	0.78	0.32	0.1	0.35	0.23
09SEP79	36	36	0.42	0.17	0.37	0.15	0.54	0.12	0.37	0.84	0.32	<0.04	0.35	0.2
20SEP79	47	47	0.32	0.083	0.31	0.06	0.44	0.077	0.26	0.75	0.17	<0.04	0.3	0.088
29SEP79	56	56	0.23	0.052	0.19	0.043	0.42	<0.04	0.2	0.55	0.14	<0.04	0.22	0.072
14OCT79	71	71	0.17	<0.04	0.16	<0.04	0.37	<0.04	0.098	0.32	0.11	0.056	0.11	<0.04
01NOV79	89	89	0.091	<0.04	0.15	<0.04	0.26	<0.04	0.17	0.5	0.062	0.043	0.078	0.045
24NOV79	112	112	0.21	0.075	0.37	0.13	0.91	0.22	0.55	1.2	0.49	0.21	0.73	0.27
14DEC79	132	132	0.55	0.34	0.4	0.4	1.1	0.48	0.8	1.4	0.74	0.46	0.84	0.49
17JAN80	166	166	0.14	0.053	0.13	0.048	0.27	0.07	0.17	0.31	0.15	0.059	0.18	0.07
06MAR80	215	215	0.14	0.021	0.1	0.018	0.22	0.033	0.13	0.26	0.13	0.04	0.14	0.072
28APR80	268	268	<0.003	<0.003	0.027	0.004	<0.003	<0.003	<0.003	0.1	<0.003	0.17	<0.003	0.073
29JUN80	330	330	0.16	0.074	0.13	0.068	0.26	0.059	0.2	0.24	0.2	0.052	0.17	0.078
11SEP80	404	404	0.1	0.08	0.12	0.07	0.26	0.01	0.15	0.24	0.15	0.02	0.15	0.89
26DEC80	510	510	0.04	<0.002	<0.002	<0.002	0.16	<0.002	0.032	0.24	0.051	<0.002	0.01	<0.002
18JUN81	684	549	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
17JUL81	713	578	<0.01	<0.01	<0.01	<0.01	0.053	<0.01	<0.01	0.053	0.029	<0.01	<0.01	<0.01
17AUG81	744	609	0.12	<0.01	0.043	0.026	0.22	0.015	0.11	0.17	0.11	<0.01	<0.01	0.039
17SEP81	775	640	0.057	<0.01	<0.01	<0.01	0.18	0.045	0.086	0.19		<0.01	0.053	<0.01
19OCT81	807	672	<0.01	<0.01	<0.01	<0.01	0.17	<0.01	<0.01	0.16	0.097	0.017	<0.01	<0.01

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= NICKEL

SAMPLE DATE	DAYS A	DAYS O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.12	0.36	0.084	0.17	0.17	0.12	0.086	0.44	0.07	0.082	0.11	1.3
06AUG79	2	2	0.08	0.19	0.12	0.2	0.19	V	0.076	0.32	0.045	0.039	0.089	0.63
07AUG79	3	3	0.062	0.18	0.11	0.14	0.1	V	0.044	0.25	0.045	<0.02	0.065	0.59
08AUG79	4	4	V	0.13	0.084	0.11	V	V	0.058	0.25	V	0.026	V	0.53
11AUG79	7	7	0.091	0.15	0.12	0.13	0.11	0.098	0.081	0.25	0.051	0.02	0.082	0.55
12AUG79	8	8	0.11	0.2	0.14	0.16	0.11	0.07	0.1	0.23	0.066	0.032	0.12	0.48
14AUG79	10	10	0.064	0.1	0.082	0.088	0.059	0.062	0.076	0.21	0.054	0.04	0.1	0.42
16AUG79	12	12	0.14	0.12	0.14	0.12	0.14	0.11	0.13	0.22	0.057	0.053	0.13	0.42
19AUG79	15	15	0.13	0.14	0.13	0.12	0.12	0.092	0.17	0.25	0.069	0.071	0.14	0.4
24AUG79	20	20	0.15	0.12	0.1	0.12	0.12	0.11	0.14	0.24	0.082	0.073	0.15	0.36
28AUG79	24	24	0.099	0.11	0.1	0.11	0.09	0.11	0.11	0.23	0.077	0.14	0.13	0.31
02SEP79	29	29	0.088	0.11	0.093	0.11	0.08	0.1	0.093	0.24	0.075	0.15	0.11	0.31
09SEP79	36	36	0.11	0.12	0.12	0.1	0.095	0.095	0.097	0.22	0.076	0.073	0.1	0.27
20SEP79	47	47	0.13	0.13	0.17	0.13	0.15	0.11	0.12	0.25	0.1	0.11	0.16	0.29
29SEP79	56	56	0.13	0.14	0.14	0.13	0.12	0.12	0.11	0.23	0.1	0.12	0.15	0.24
14OCT79	71	71	0.077	0.097	0.11	0.09	0.08	0.083	0.058	0.17	0.07	0.21	0.073	0.19
01NOV79	89	89	0.11	0.092	0.16	0.097	0.083	0.1	0.07	0.32	0.072	0.21	0.086	0.22
24NOV79	112	112	<0.015	<0.015	0.039	<0.015	<0.015	<0.015	<0.015	0.085	<0.015	0.091	<0.015	0.086
14DEC79	132	132	<0.015	<0.015	0.55	<0.015	<0.015	<0.015	<0.015	0.21	0.23	0.23	<0.015	0.18
17JAN80	166	166	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.036	<0.015	0.021	<0.015	0.098
06MAR80	215	215	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
28APR80	268	268	<0.017	<0.017	0.027	<0.017	.	.	<0.017	0.1	<0.017	0.17	<0.017	0.073
29JUN80	330	330	0.076	0.14	0.14	0.098	0.057	0.088	0.083	0.23	0.023	0.24	0.018	0.13
11SEP80	404	404	0.04	0.1	0.08	0.08	0.03	<0.017	0.04	0.19	0.06	0.13	0.08	0.11
26DEC80	510	510	<0.003	0.031	0.034	0.055	<0.003	0.03	<0.003	0.091	<0.003	0.091	0.019	0.039
18JUN81	684	549	0.023	0.075	0.075	0.087	0.089	0.12	0.073	0.17	0.098	0.25	0.061	0.14
17JUL81	713	578	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.052	0.043	0.028	<0.015	<0.015
17AUG81	744	609	0.043	<0.015	<0.015	0.029	0.025	0.053	0.048	0.11	0.02	0.1	<0.015	0.063
17SEP81	775	640	<0.015	<0.015	<0.015	0.016	0.034	0.033	0.028	0.095		0.055	0.03	<0.015
19OCT81	807	672	<0.015	<0.015	<0.015	<0.015	0.026	<0.015	<0.015	0.058	0.025	0.083	<0.015	<0.015

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= PH

SAMPLE DATE	DAYS A	DAYS O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	8.2	E	7.8	7.8	8.5	E	8	7.8	12	*	9.6	7.5
06AUG79	2	2	8.5	7.6	7.9	7.6	7.8	V	8.2	8	11	7.1	9.2	7.3
07AUG79	3	3	8.1	7.5	1.3	7.7	7.7	V	8.2	7.8	11	6.1	7.8	7.3
08AUG79	4	4	V	7.5	E	7.6	V	V	E	E	V	E	V	7.6
11AUG79	7	7	7.5	7.3	7.7	7.3	7.5	7.6	7.8	7.7	8.9	7	7.9	7.7
12AUG79	8	8	7.8	7.4	7.8	7.4	7.5	7.7	7.6	7.7	8.8	6.5	7.8	7.4
14AUG79	10	10	7.7	7.5	7.9	7.5	7.6	7.9	7.6	7.8	9.2	7.5	7.8	7.6
16AUG79	12	12	E	7.3	E	7.4	7.9	7.7	7.8	7.7	9.8	7.2	7.7	7.4
19AUG79	15	15	8	7.2	7.4	7.3	7.7	7.6	7.6	7.7	7.6	6.9	7.8	7.4
24AUG79	20	20	7.6	7.5	7.8	7.6	7.7	7.5	7.4	7.5	7.4	6.7	7.7	7.5
28AUG79	24	24	7.7	7.5	7.6	7.8	7.7	7.6	7.4	7.9	7.8	*	7.7	7.8
02SEP79	29	29	7.8	7.5	7.5	7.7	7.7	7.7	7.7	7.9	7.8	7.9	7.6	7.3
09SEP79	36	36	7.8	7.5	7.6	7.3	7.5	7.5	7.5	7.6	7.5	7.1	7.7	7.4
20SEP79	47	47	7.9	7.4	8.1	7.5	8.2	7.7	7.5	7.7	8	7.3	7.6	7.3
29SEP79	56	56	7.4	7.1	7.5	7.2	7.5	7.3	7.3	7.4	7.4	6.6	7.4	7
14OCT79	71	71	7.3	7.2	7.4	7.1	7.4	7.2	7.3	7.4	7.5	5.5	7.3	7
01NOV79	89	89	7.9	7.8	8	7.6	7.8	7.7	7.7	7.8	7.8	6.2	7.8	7.5
24NOV79	112	112	8	7.2	8.1	7.4	7.8	7.4	7.5	7.6	7.7	6.1	7.7	7.1
14DEC79	132	132	7.8	7.7	I	7.3	9.8	7.2	7.6	7.5	7.6	5.9	7.3	7.3
17JAN80	166	166	7.9	7.3	8.1	7.3	12	7.3	7.6	7.5	7.5	5.5	7.4	7.3
06MAR80	215	215	7.6	7.5	8	7.3	12	7.4	7.5	7.9	12	5.9	7.8	7.3
28APR80	268	268	7.9	7.8	7.9	7.7	12	7.6	7.8	7.8	12	5.2	7.7	7.6
29JUN80	330	330	7.3	7.1	7.8	7.6	7.6	7.3	7.5	7.1	7	5.6	7.4	7.1
11SEP80	404	404	7.4	7	7.1	7.1	6.8	7	7.5	7.2	7	5.3	7.6	7
26DEC80	510	510	7.3	7.1	7.6	7.3	8.9	7.5	7.6	7.9	7.5	5.3	7.5	7.2
18JUN81	684	549	7.6	7.6	7.2	7.6	7.9	7.4	7.3	7.7	7.1	5.5	7.4	7.5
17JUL81	713	578	8.1	7.3	7.3	7.4	7.8	7.4	7.3	7.9	7.5	6	7.4	7.2
17AUG81	744	609	7.3	7.8	7.2	7.5	7.5	7.4	7.8	7.6	7.4	5.4	7.5	7.4
17SEP81	775	640	7.3	7.3	7.1	7.1	7.3	7.1	7.2	7.3	7.7	5.3	7.2	7.3
19OCT81	807	672	7.5	7.1	7.4	7.3	8	7.4	7.4	7.3		5.4	7.6	7.4

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS
I=INSUFFICIENT VOLUME FOR ALL ANALYSES--ICPES ONLY PERFORMED

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= POTASSIUM

SAMPLE DATE	DAYS A	DAYS D	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	<40	180	<40	<40	<40	220	<40	<40	<40	78	<40	<40
06AUG79	2	2	<40	<40	<40	<40	<40	V	<40	<40	<40	67	<40	<40
07AUG79	3	3	<40	46	<40	<40	<40	V	<40	<40	<40	56	<40	<40
08AUG79	4	4	V	160	<40	<40	V	V	2300	<40	V	120	V	<40
11AUG79	7	7	<40	<40	<40	<40	<40	160	<40	<40	<40	54	<40	<40
12AUG79	8	8	<40	<40	<40	<40	<40	160	<40	<40	<40	47	<40	<40
14AUG79	10	10	<40	170	<40	<40	<40	140	<40	<40	<40	55	<40	<40
16AUG79	12	12	<40	150	<40	<40	<40	200	<40	<40	<40	59	<40	<40
19AUG79	15	15	<40	58	<40	<40	<40	200	<40	<40	<40	58	<40	<40
24AUG79	20	20	<40	110	<40	<40	<40	200	<40	<40	<40	51	<40	<40
28AUG79	24	24	1800	460	1100	730	1700	230	1800	1300	1800	370	1400	670
02SEP79	29	29	1700	450	1100	750	1700	220	1600	1300	1700	350	1300	680
09SEP79	36	36	1800	480	1400	700	1900	190	1600	940	1700	110	1300	590
20SEP79	47	47	1400	340	1300	480	1700	140	1100	710	1500	92	1200	440
29SEP79	56	56	1200	440	830	660	1500	110	910	600	1200	56	970	630
14OCT79	71	71	770	530	1000	610	890	130	580	630	760	150	680	610
01NOV79	89	89	600	320	890	480	880	160	580	490	690	176	600	500
24NOV79	112	112	810	240	810	330	530	12	340	270	410	31	300	290
14DEC79	132	132	250	200	330	320	260	11	190	190	170	21	180	250
17JAN80	166	166	590	230	1400	480	330	23	290	240	250	38	300	380
06MAR80	215	215	350	400	1100	580	270	34	250	400	250	74	270	500
28APR80	268	268	450	320	480	390	240	51	160	360	360	390	220	560
29JUN80	330	330	300	270	490	330	170	56	280	310	450	350	180	470
11SEP80	404	404	160	180	110	210	90	48	220	170	620	270	130	260
26DEC80	510	510	140	230	100	210	110	39	200	140	540	310	160	360
18JUN81	684	549	170	310	100	250	120	43	180	170	960	390	110	310
17JUL81	713	578	160	300	100	240	160	47	160	168	800	320	130	340
17AUG81	744	609	170	260	53	160	150	53	150	140	490	250	120	320
17SEP81	775	640	220	290	70	190	170	57	120	150		250	160	310
19OCT81	807	672	240	320	100	230	230	41	180	170	840	400	220	430

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER> SELENIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	<0.005	.	<0.005	<0.005	<0.005	.	<0.005	<0.005	<0.005	.	<0.005	<0.005
06AUG79	2	2	<0.005	<0.005	<0.005	<0.005	<0.005	V	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
07AUG79	3	3	<0.005	<0.005	<0.005	<0.005	<0.005	V	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
08AUG79	4	4	V	<0.005	<0.005	<0.005	V	V	.	<0.005	V	<0.005	V	<0.005
11AUG79	7	7	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
12AUG79	8	8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
14AUG79	10	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
16AUG79	12	12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
19AUG79	15	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
24AUG79	20	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
28AUG79	24	24	D	D	D	D	D	D	D	D	D	D	D	D
02SEP79	29	29	D	D	D	D	D	D	D	D	D	D	D	D
09SEP79	36	36	D	D	D	D	D	D	D	D	D	D	D	D
20SEP79	47	47	D	D	D	D	D	D	D	D	D	D	D	D
29SEP79	56	56	D	D	D	D	D	D	D	D	D	D	D	D
14OCT79	71	71	D	D	D	D	D	D	D	D	D	D	D	D
01NOV79	89	89	D	D	D	D	D	D	D	D	D	D	D	D
24NOV79	112	112	D	D	D	D	D	D	D	D	D	D	D	D
14DEC79	132	132	D	D	I	D	D	D	D	D	D	D	D	D
17JAN80	166	166	D	D	D	D	D	D	D	D	D	D	D	D
06MAR80	215	215	D	D	D	D	D	D	D	D	D	D	D	D
28APR80	268	268	D	D	D	D	D	D	D	D	D	D	D	D
29JUN80	330	330	D	D	D	D	D	D	D	D	D	D	D	D
11SEP80	404	404	D	D	D	D	D	D	D	D	D	D	D	D
26DEC80	510	510	D	D	D	D	D	D	D	D	D	D	D	D
18JUN81	684	549	D	D	D	D	D	D	D	D	D	D	D	D
17JUL81	713	578	D	D	D	D	D	D	D	D	D	D	D	D
17AUG81	744	609	D	D	D	D	D	D	D	D	D	D	D	D
17SEP81	775	640	D	D	D	D	D	D	D	D	D	D	D	D
19OCT81	807	672	D	D	D	D	D	D	D	D	D	D	D	D

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS
I=INSUFFICIENT VOLUME FOR ALL ANALYSES--ICPES ONLY PERFORMED
D=DISCONTINUED AFTER DL REACHED

PARAMETER= SILICON

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	38	48	32	24	19	63	44	25	7.1	60	39	15
06AUG79	2	2	35	16	35	9.9	29	V	49	17	100	13	41	9.4
07AUG79	3	3	45	22	38	20	31	V	65	30	86	12	55	14
08AUG79	4	4	V	26	36	25	V	V	85	34	V	14	V	19
11AUG79	7	7	28	21	26	18	17	48	53	31	82	16	48	18
12AUG79	8	8	20	14	28	14	11	33	33	18	69	16	33	9.4
14AUG79	10	10	31	20	51	18	18	33	55	25	77	15	52	13
16AUG79	12	12	56	29	61	30	28	38	68	36	96	18	68	17
19AUG79	15	15	23	32	20	28	18	46	35	44	88	20	33	22
24AUG79	20	20	35	32	20	33	26	45	25	45	82	23	39	27
28AUG79	24	24	23	29	12	21	13	35	31	36	67	25	29	26
02SEP79	29	29	29	25	18	22	13	38	34	28	59	23	29	22
09SEP79	36	36	36	32	35	28	21	46	34	40	57	25	36	27
20SEP79	47	47	80	71	80	72	50	88	56	79	100	52	65	63
29SEP79	56	56	49	36	43	29	41	70	44	62	78	41	49	27
14OCT79	71	71	38	28	51	28	23	49	35	35	51	31	30	24
01NOV79	89	89	46	45	54	47	27	49	46	49	60	35	49	41
24NOV79	112	112	27	20	35	23	19	28	28	26	28	17	22	18
14DEC79	132	132	11	15	45	16	7.3	24	16	24	15	15	11	13
17JAN80	166	166	17	11	33	10	5.6	18	13	19	17	14	11	13
05MAR80	215	215	6.1	7.3	26	7.4	4.1	14	11	18	6.4	11	7.2	7.1
28APR80	268	268	9.9	7.8	20	8.6	0.94	13	8.1	8.7	5.6	9.9	11	5.7
29JUN80	330	330	19	11	30	12	42	18	18	13	53	12	21	9.8
11SEP80	404	404	20	11	27	14	42	22	20	13	47	13	20	14
26DEC80	510	510	7.5	4.9	18	9.6	33	14	15	6.8	33	8.8	14	4.9
18JUN81	684	549	8.3	12	22	4.7	44	13	18	6	55	11	9.8	4
17JUL81	713	578	6.1	9.7	22	8.9	39	18	21	8.1	44	9.4	16	8.1
17AUG81	744	609	10	10	14	4.7	58	20	31	9.3	43	9.7	21	8.7
17SEP81	775	640	14	16	20	9.2	50	20	21	11	51	12	16	15
19OCT81	807	672	14	9.4	23	11	55	20	22	9.8	51	14	21	10

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= SILVER

SAMPLE DATE	DAYS A	DAYS D	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.021	0.012	0.014	0.015	0.02	0.018	0.0073	0.017	0.014	0.017	0.014	0.028
06AUG79	2	2	0.0093	0.044	0.03	0.038	0.027	V	<0.005	0.019	<0.005	<0.005	0.019	0.035
07AUG79	3	3	<0.005	0.03	0.021	0.02	0.014	V	0.0059	0.011	0.011	0.0069	0.012	0.029
08AUG79	4	4	V	0.019	0.017	0.011	V	V	0.037	0.014	V	<0.005	V	0.025
11AUG79	7	7	0.017	0.031	0.029	0.028	0.019	0.0087	0.0066	0.012	0.012	<0.005	0.015	0.032
12AUG79	8	8	0.025	0.047	0.023	0.022	0.024	<0.005	0.018	0.015	0.02	<0.005	0.016	0.034
14AUG79	10	10	<0.005	<0.005	0.0079	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.033
16AUG79	12	12	0.02	<0.005	0.0083	<0.005	0.025	0.0053	<0.005	<0.005	<0.005	<0.005	<0.005	0.029
19AUG79	15	15	0.014	<0.005	0.018	0.0074	0.02	0.015	<0.005	<0.005	0.0096	<0.005	0.015	0.042
24AUG79	20	20	0.01	<0.005	0.006	<0.005	0.019	<0.005	<0.005	<0.005	0.01	<0.005	<0.005	0.018
28AUG79	24	24	0.025	0.036	0.04	0.029	0.037	0.034	0.038	0.02	0.038	0.024	0.04	0.048
02SEP79	29	29	0.032	0.035	0.047	0.03	0.042	0.043	0.038	0.045	0.04	0.034	0.04	0.063
09SEP79	36	36	0.043	0.043	0.06	0.034	0.033	0.022	0.029	0.037	0.045	0.0066	0.046	0.058
20SEP79	47	47	0.0071	<0.005	0.013	<0.005	0.0055	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011
29SEP79	56	56	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
14OCT79	71	71	0.018	<0.005	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	<0.005	0.02
01NOV79	89	89	<0.005	<0.005	0.0073	<0.005	<0.005	0.0068	<0.005	0.029	<0.005	0.018	<0.005	0.014
24NOV79	112	112	0.027	0.071	0.12	0.11	0.14	0.17	0.15	0.2	0.18	0.2	0.24	0.22
14DEC79	132	132	0.13	0.2	0.11	0.11	0.12	0.19	0.18	0.2	0.19	0.23	0.21	0.22
17JAN80	166	166	0.011	0.084	0.024	0.077	0.019	0.091	0.039	0.13	0.056	0.11	0.076	0.11
06MAR80	215	215	0.0051	0.0077	0.015	0.0095	0.012	0.016	0.024	0.042	0.051	0.061	0.081	0.1
2APR80	268	268	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.014	<0.002	<0.002
29JUN80	330	330	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
11SEP80	404	404	0.1	0.17	0.17	0.15	0.14	<0.002	0.11	0.15	0.1	0.09	0.14	0.18
26DEC80	510	510	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
18JUN81	684	549	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.02	<0.005	0.032	<0.005	0.14
17JUL81	713	578	<0.01	<0.01	0.022	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
17AUG81	744	609	<0.01	<0.009	<0.009	<0.009	<0.01	<0.01	<0.01	<0.009	<0.01	<0.009	<0.009	<0.009
17SEP81	776	640	<0.01	<0.01	<0.01	<0.01	<0.01	0.059	<0.01	0.011	<0.01	0.03	<0.01	<0.01
19OCT81	807	672	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= SODIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILE) U	CELL 3 (TILE) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	4800	21	2900	440	4200	13	2500	3000	1800	<5	1800	620
06AUG79	2	2	1900	120	630	350	3000	V	1700	1900	1300	<5	310	320
07AUG79	3	3	960	110	350	310	1600	V	810	1500	460	<5	220	250
08AUG79	4	4	V	100	350	280	V	V	91	1700	V	<5	V	200
11AUG79	7	7	830	99	270	300	1200	6.7	800	1500	450	<5	210	200
12AUG79	8	8	510	110	250	300	520	<5	470	990	370	<5	170	250
14AUG79	10	10	12	48	35	45	<5	6.7	25	<5	45	<5	49	49
16AUG79	12	12	<5	43	38	48	<5	6	25	<5	48	<5	49	48
19AUG79	15	15	33	49	49	48	<5	5.8	39	<5	49	6.2	46	45
24AUG79	20	20	49	47	42	49	27	6.5	47	<5	49	7.8	44	43
28AUG79	24	24	51	49	31	52	57	12	67	120	50	28	39	37
02SEP79	29	29	50	37	30	53	56	13	54	84	50	25	36	37
09SEP79	36	36	55	42	49	52	68	14	60	110	51	14	39	36
20SEP79	47	47	260	180	250	250	340	56	220	520	240	68	190	150
29SEP79	56	56	190	190	140	180	288	66	180	420	190	68	150	160
14OCT79	71	71	74	110	120	100	99	71	68	180	74	150	60	93
01NOV79	89	89	84	99	120	76	90	62	58	230	63	170	57	94
24NOV79	112	112	220	180	220	120	130	98	83	220	81	240	57	110
14DEC79	132	132	47	84	72	72	57	77	38	190	29	170	29	85
17JAN80	166	166	340	270	940	210	190	420	160	510	110	720	130	270
06MAR80	215	215	130	250	530	190	110	400	98	690	88	720	90	200
28APR80	268	268	168	190	180	120	94	380	59	400	120	240	70	170
29JUN80	330	330	120	180	200	110	78	260	110	190	160	120	66	130
11SEP80	404	404	67	200	55	110	46	190	110	33	270	47	60	73
26DEC80	510	510	59	230	45	110	50	120	88	52	240	50	68	76
18JUN81	684	549	62	230	40	83	49	92	69	35	360	47	41	63
17JUL81	713	578	61	220	43	93	74	98	60	32	320	41	50	68
17AUG81	744	609	64	170	20	54	69	83	55	34	180	38	46	59
17SEP81	775	640	88	180	32	77	86	72	46	40	240	32	66	61
19OCT81	807	672	88	170	46	92	98	83	68	44		45	83	72

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= STRONTIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	1	3.9	1.4	2.5	0.61	3.4	1.7	13	1.7	2.5	1.1	3
06AUG79	2	2	0.98	2	1.4	1.9	0.63	V	1.1	8.8	1.3	0.39	1.5	2.1
07AUG79	3	3	0.83	1.8	1.4	1.8	0.51	V	0.82	9.7	1.7	0.25	1.1	2.1
08AUG79	4	4	V	1.8	1.2	1.7	V	V	0.91	9.8	V	0.25	V	2.1
11AUG79	7	7	0.84	1.6	1.4	1.6	0.47	2.1	0.87	9.2	1.3	0.24	1	2
12AUG79	8	8	0.86	1.5	1.4	1.6	0.46	0.76	0.9	7.9	1.5	0.25	1.2	1.9
14AUG79	10	10	1	1.9	1.6	1.8	0.56	0.63	0.95	9	1.7	0.35	1.2	2
16AUG79	12	12	1.2	1.8	1.7	1.7	0.54	0.61	0.98	9.4	1.3	0.37	1.2	2
19AUG79	15	15	0.81	1.8	1.2	1.7	0.51	0.59	0.87	9.6	1.2	0.38	0.92	2
24AUG79	20	20	0.98	1.8	0.96	1.7	0.56	0.59	0.8	9.5	1.2	0.42	0.94	2
28AUG79	24	24	0.85	2	1.3	1.9	0.54	0.71	0.9	9.8	1.4	1.7	0.86	2.2
02SEP79	29	29	1	1.9	1.4	1.9	0.56	0.72	0.94	8.8	1.4	1.5	1	2.2
09SEP79	36	36	1	2	1.4	1.9	0.6	0.68	0.77	9.8	1.4	0.64	0.98	2.2
20SEP79	47	47	0.94	1.8	1.3	1.8	0.52	0.58	0.74	9.4	1.3	0.63	0.77	2
29SEP79	56	56	0.98	1.8	1.2	1.6	0.53	0.56	0.89	7.9	1.2	0.56	0.91	1.8
14OCT79	71	71	1.6	1.8	1.6	1.8	1.4	0.75	1.5	7.2	1.5	1.5	1.7	2.3
01NOV79	89	89	1.9	2.3	2.2	2.2	1.3	0.83	1.5	8.6	1.7	1.4	1.9	2.4
24NOV79	112	112	1.5	1.5	1.5	1.6	1.7	0.67	0.67	8.9	1.2	1.1	1.1	1.9
14DEC79	132	132	1	1.4	2.8	1.5	1.4	0.26	1.1	8.2	0.81	0.81	1.2	1.6
17JAN80	166	166	1.4	1.4	1.4	1.3	1.3	0.61	1.2	7.8	1.3	1.1	1	2.1
06MAR80	215	215	1	1.4	1.2	1.3	1.6	0.53	1.2	6.5	1.1	0.88	0.82	1.5
28APR80	268	268	1.1	1.2	0.91	1.1	1.2	0.29	1.4	6.3	1.8	0.9	1.5	1.6
29JUN80	330	330	1.1	1.1	0.83	1.1	0.88	0.26	1.6	6.5	1.6	0.71	1.5	1.4
11SEP80	404	404	0.91	1	0.62	1.1	0.86	0.23	1.7	6.4	1.1	0.4	1	1.2
26DEC80	510	510	0.94	1.2	0.78	1.2	0.95	0.17	1.6	7.5	1	0.39	1.1	1.4
18JUN81	684	549	1.2	1.6	1.2	1.3	1.4	0.39	1.8	7.1	1	0.58	1.3	1.7
17JUL81	713	578	0.99	1.5	0.82	1.3	1.1	0.29	1.9	7.3	1.2	0.46	1.1	1.6
17AUG81	744	609	1.1	1.4	0.74	1.2	1.2	0.32	1.8	7.8	1.2	0.58	1.2	1.6
17SEP81	775	640	0.98	1.6	0.69	1.3	0.91	0.3	2	8.3	1.6	0.56	1.1	1.6
19OCT81	807	672	1.1	1.6	0.73	1.5	0.84	0.19	2.3	8.8	1.6	0.71	1.1	1.9

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= SULPHATES

SAMPLE DATE	DAYS A	DAYS - C	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	26000	E	17000	4000	33000	E	17000	13000	12000	89	20000	9000
06AUG79	2	2	14000	3200	8000	5400	27000	V	13000	12000	9700	90	5400	6100
07AUG79	3	3	9500	2800	6000	4300	16000	V	8200	7700	6000	120	4500	5600
08AUG79	4	4	V	2600	E	4200	V	V	E	E	V	E	V	5100
11AUG79	7	7	11000	2600	5500	3900	14000	340	9000	7900	6400	63	4900	5400
12AUG79	8	8	8100	2800	5300	4000	7200	440	6500	7000	6100	84	4600	5500
14AUG79	10	10	8000	3100	6400	4000	8700	970	6400	6600	4900	200	4800	5100
16AUG79	12	12	E	3000	E	3700	11000	1400	6900	6500	5400	210	6200	4900
19AUG79	15	15	9100	3400	6000	4100	9700	1600	4900	6700	5400	340	5600	4400
24AUG79	20	20	7100	3200	6500	3900	9800	1800	6800	6300	5400	480	5700	4300
28AUG79	24	24	5500	3700	4000	4100	5900	2300	6800	6500	5400	2000	6300	4500
02SEP79	29	29	5700	3400	4000	4100	5500	2200	5500	6000	5100	2300	5000	4400
09SEP79	36	36	6200	3600	5300	4100	7200	2100	6300	6100	5300	920	5700	4300
23SEP79	47	47	5700	3300	5900	3700	8200	1800	5500	6100	5500	1000	7100	4200
29SEP79	56	56	5000	3700	4200	3900	6800	2000	4300	5200	4600	1000	5400	4300
14OCT79	71	71	3100	3400	4000	3300	3800	2600	2300	3800	2800	3200	3100	4200
01NOV79	89	89	3400	3200	4200	3000	4000	2800	2500	4500	2600	3200	2800	3900
24NOV79	112	112	4100	3200	5900	3400	4100	3100	2900	4400	3300	3900	4100	4300
14DEC79	132	132	2300	3100	I	3200	2300	2800	2200	4600	2100	3700	2500	3900
17JAN80	166	166	2500	2600	5500	2700	1800	3000	1600	3500	1600	3400	2100	3600
06MAR80	215	215	1700	2600	4100	2600	1300	3100	1400	3300	1400	3300	2000	3300
28APR80	268	268	2100	2200	2300	2100	1600	2800	1400	2400	1500	2300	1500	2900
29JUN80	330	330	1600	2300	2500	2200	1500	2000	1500	2100	1800	1900	1500	2900
11SEP80	404	404	1300	2500	1400	2100	1100	1500	1300	1600	2000	1100	1300	2700
26DEC80	510	510	1200	2400	1600	2100	1000	1600	1400	1700	1700	1200	1200	2600
18JUN81	684	549	1300	2800	1200	1900	960	1100	1300	1200	2300	950	1300	2400
17JUL81	713	578	1400	2800	1500	2200	1500	1400	1300	1400	2300	1000	380	2700
17AUG81	744	609	1500	2700	1400	1500	1400	1300	1200	1400	1800	1000	1300	2600
17SEP81	775	640	1600	2900	1500	2300	1400	1200	1200	1500		1100	1500	2600
19OCT81	807	672	1500	2700	1500	2300	1300	1300	1200	1500	1500	1000	1400	2600

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS
I=INSUFFICIENT VOLUME FOR ALL ANALYSES--ICPES ONLY PERFORMED

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER: TITANIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.026	0.0093	0.015	0.024	0.027	0.0078	0.018	0.023	0.013	<0.002	0.022	0.026
06AUG79	2	2	0.012	0.028	0.016	0.027	0.028	V	0.013	0.022	0.0058	<0.002	0.014	0.028
07AUG79	3	3	0.01	0.029	0.019	0.022	0.021	V	0.012	0.027	0.009	0.0054	0.013	0.056
08AUG79	4	4	V	0.089	0.16	0.059	V	V	0.0098	0.02	V	0.0028	V	0.024
11AUG79	7	7	0.017	0.026	0.022	0.02	0.018	0.0076	0.012	0.018	0.0084	0.0031	0.014	0.027
12AUG79	8	8	0.015	0.032	0.021	0.023	0.017	0.0076	0.017	0.018	0.012	<0.002	0.016	0.025
14AUG79	10	10	0.0064	0.014	0.01	0.0094	0.011	0.0026	0.0023	0.0073	<0.002	<0.002	0.0059	0.016
16AUG79	12	12	0.015	0.016	0.011	0.0096	0.015	0.0081	0.0039	0.0093	<0.002	<0.002	0.0096	0.016
19AUG79	15	15	0.013	0.013	0.011	0.012	0.014	0.011	0.012	0.01	0.0026	<0.002	0.016	0.019
24AUG79	20	20	0.012	0.011	0.0075	0.0091	0.013	0.011	0.014	0.011	0.0071	<0.002	0.016	0.019
28AUG79	24	24	0.022	0.024	0.018	0.021	0.016	0.025	0.022	0.018	0.015	0.011	0.025	0.025
02SEP79	29	29	0.013	0.023	0.016	0.02	0.013	0.022	0.018	0.021	0.011	0.011	0.022	0.024
09SEP79	36	36	0.019	0.019	0.015	0.017	0.016	0.015	0.015	0.018	0.0092	<0.002	0.02	0.02
20SEP79	47	47	0.03	0.032	0.03	0.021	0.025	0.024	0.021	0.024	0.011	<0.002	0.033	0.028
29SEP79	56	56	0.02	0.021	0.017	0.019	0.012	0.015	0.01	0.01	0.0051	<0.002	0.019	0.019
14OCT79	71	71	0.0034	0.0049	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
01NOV79	89	89	0.0029	<0.002	<0.002	<0.002	<0.002	0.0039	<0.002	<0.002	0.012	0.028	0.017	0.025
24NOV79	112	112	0.1	0.28	0.41	0.42	0.5	0.63	0.57	0.72	0.65	0.71	0.84	0.74
14DEC79	132	132	0.5	0.73	0.44	0.44	0.49	0.71	0.69	0.77	0.72	0.86	0.8	0.8
17JAN80	166	166	0.018	0.15	0.028	0.13	0.033	0.15	0.068	0.26	0.1	0.19	0.13	0.19
06MAR80	215	215	0.013	0.015	0.024	0.018	0.028	0.028	0.048	0.077	0.099	0.11	0.15	0.19
28APR80	268	268	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	0.025	<0.005	<0.005
29JUN80	330	330	0.13	0.18	0.17	0.18	0.098	0.071	0.14	0.25	0.063	0.12	0.028	0.19
11SEP80	404	404	0.15	0.28	0.29	0.24	0.22	<0.008	0.06	0.25	0.17	0.06	0.24	0.29
26DEC80	510	510	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
18JUN81	684	549	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.1	<0.025	0.19
17JUL81	713	578	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
17AUG81	744	609	0.22	<0.025	<0.025	<0.025	0.1	0.085	0.22	<0.025	0.075	<0.025	<0.025	<0.025
17SEP81	775	640	0.025	<0.025	<0.025	<0.025	<0.025	0.09	<0.025	<0.025		<0.025	<0.025	<0.025
19OCT81	807	672	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.064	<0.025	<0.025

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= TOTAL DISSOLVED SOLIDS

SAMPLE DATE	DAYS A	DAYS - 0	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	45000	E	29000	6800	61000	E	28000	22000	23000	.	28000	13000
06AUG79	2	2	25000	5900	14000	8800	44000	V	24000	21000	19000	260	9500	10000
07AUG79	3	3	18000	5300	11000	7300	26000	V	15000	15000	11000	230	7900	9300
08AUG79	4	4	V	5100	E	7100	V	V	E	E	V	E	V	8700
11AUG79	7	7	19000	5500	10000	7300	25000	1600	16000	15000	12000	230	8500	8800
12AUG79	8	8	14000	5800	9700	7500	13000	1600	11000	14000	11000	290	7900	9000
14AUG79	10	10	14000	5900	12000	7300	15000	2500	12000	13000	9500	450	8100	8200
16AUG79	12	12	E	5700	E	6800	20000	2700	13000	13000	9900	470	8800	7900
19AUG79	15	15	16000	6300	11000	7300	17000	2800	13000	13000	9900	640	10000	7900
24AUG79	20	20	13000	5900	11000	7000	16000	3300	12000	12000	10000	1100	10000	7800
28AUG79	24	24	11000	6800	7000	7400	10000	4400	12000	12000	10000	3600	11000	7800
02SEP79	29	29	10000	6000	7300	7300	9900	4200	10000	12000	9600	4100	9100	7700
09SEP79	36	36	11000	6300	9400	7200	13000	4000	11000	11000	9600	1700	9600	7100
20SEP79	47	47	11000	6000	10000	6700	14000	3600	9800	11000	9900	1800	12000	7000
29SEP79	56	56	9200	6500	7500	7000	12000	4000	8100	10000	8600	1900	9400	7400
14OCT79	71	71	5900	6200	7800	6300	6900	5100	5000	7100	5500	5400	5600	7100
01NOV79	89	89	5800	5500	7700	5600	7000	5000	4700	8700	5200	5500	5200	6900
24NOV79	112	112	6900	5700	9800	5500	6900	5300	5200	8200	5700	5900	6600	6800
14DEC79	132	132	4200	5600	I	5500	4000	5000	3900	7900	3700	6100	4600	6700
17JAN80	166	166	4500	4700	9900	4900	3300	5300	3000	6200	2900	5600	3800	6100
06MAR80	215	215	3000	4400	7100	4500	3000	4900	2300	5900	2600	5200	3400	5500
28APR80	268	268	3400	3800	4000	3600	3200	4100	2400	4200	2600	3800	2600	4800
29JUN80	330	330	3200	4500	4700	4100	2800	3700	3000	3800	3300	3000	2700	4800
11SEP80	404	404	2700	4400	2900	3900	2400	3200	2900	3200	3800	2100	2500	4300
26DEC80	510	510	2400	4400	2800	3700	1900	2800	2600	3000	3200	2100	2600	4500
18JUN81	684	549	2400	4500	2600	3600	2100	2400	2500	2500	4300	2100	2300	4200
17JUL81	713	578	2800	4800	2800	4100	2700	2700	2700	2300	3800	1600	2300	4300
17AUG81	744	609	2700	4400	2500	3600	2600	2300	2400	2800	3400	1900	2600	4300
17SEP81	775	640	2900	4800	2200	3500	2500	2100	2400	3000		2000	2600	4500
19OCT81	807	672	2500	4400	2500	3800	2700	2400	2600	3000	3300	1900	2900	4700

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS
I=INSUFFICIENT VOLUME FOR ALL ANALYSES--ICPES ONLY PERFORMED

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= TOTAL INORGANIC CARBON

SAMPLE DATE	DAYS A - C	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0 0		E				E						
06AUG79	2 2						V						
07AUG79	3 3						V						
08AUG79	4 4	V		E		V	V	E	E	V	E	V	
11AUG79	7 7												
12AUG79	8 8												
14AUG79	10 10												
16AUG79	12 12	E		E									
19AUG79	15 15												
24AUG79	20 20												
28AUG79	24 24												
02SEP79	29 29												
09SEP79	36 36												
20SEP79	47 47												
29SEP79	56 56												
14OCT79	71 71												
01NOV79	89 89												
24NOV79	112 112												
14DEC79	132 132			I									
17JAN80	166 166												
06MAR80	215 215												
28APR80	268 268												
29JUN80	330 330												
11SEP80	404 404												
26DEC80	510 510	34	50			2.4	31	35	72	9.4	4.5	39	51
18JUN81	684 549	30	48	29	49	11	52	39	46	41	<2	27	54
17JUL81	713 578												
17AUG81	744 609												
17SEP81	775 640	50	64	34	68	16	63	61	69		<2	65	58
19OCT81	807 672												

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS
I=INSUFFICIENT VOLUME FOR ALL ANALYSES--ICPES ONLY PERFORMED

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= TOTAL ORGANIC CARBON

SAMPLE DATE	DAYS A	DAYS O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	.	E	32	21	32	E	55	37	24	.	23	8.2
06AUG79	2	2	31	17	23	8.3	27	V	32	20	31	9	14	4.5
07AUG79	3	3	.	15	.	11	18	V	18	22	17	4.6	21	6
08AUG79	4	4	V	.	E	.	V	V	E	E	V	E	V	.
11AUG79	7	7	19	14	15	10	23	.	21	20	15	7.9	12	7.2
12AUG79	8	8	10	12	12	7	7.6	19	14	17	9.9	7.9	11	2.6
14AUG79	10	10	13	9.5	.	6.4	8.1	14	18	12	7.3	4.2	14	3.7
16AUG79	12	12	E	14	E	12	15	16	38	20	14	5.9	.	4.8
19AUG79	15	15	13	15	9.8	8.7	9.2	18	23	23	20	6.4	15	5.9
24AUG79	20	20	15	14	13	10	12	16	13	18	12	7.4	16	6.3
28AUG79	24	24	15	14	5.1	6.1	3.3	14	14	14	7.8	10	11	6
02SEP79	29	29	9.5	10	7.1	6.1	4.8	12	17	7.7	11	7.6	12	5.6
09SEP79	36	36	16	14	15	8.2	14	17	18	10	11	6.5	12	5.1
20SEP79	47	47	.	26	.	21	24	25	20	16	22	16	22	9.5
29SEP79	56	56	9.8	7.8	9.6	4.8	14	15	8.9	13	9.1	7.6	14	2.8
14OCT79	71	71	6.8	5.1	13	8.2	7.2	9.3	8.6	5.7	3.8	3.2	6.5	2.1
01NOV79	89	89	17	12	21	13	9.6	15	20	11	8.4	7.6	16	5.3
24NOV79	112	112	18	7.8	23	12	13	23	16	8.6	6.1	6.2	13	3.8
14DEC79	132	132	.	.	I	.	.	.	.	.	.	.	.	.
17JAN80	166	166	.	.	.	.	.	.	.	.	.	.	.	.
06MAR80	215	215	3.7	5	.	6.4	2.7	34	11	8.6	6.6	5	9.9	3.6
28APR80	268	268	.	.	.	.	.	.	.	.	.	.	.	.
29JUN80	330	330	.	.	.	.	.	.	.	.	.	.	.	.
11SEP80	404	404	.	.	.	.	.	.	.	.	.	.	.	.
26DEC80	510	510	10	10	15	15	7.1	14	37	5	39	3.1	47	5.3
18JUN81	684	549	.	.	.	.	.	.	.	.	.	.	.	.
17JUL81	713	578	.	.	.	.	.	.	.	.	.	.	.	.
17AUG81	744	609	.	.	.	.	.	.	.	.	.	.	.	.
17SEP81	775	640	.	.	.	.	.	.	.	.	.	.	.	.
19OCT81	807	672	.	.	.	.	.	.	.	.	.	.	.	.

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS
I=INSUFFICIENT VOLUME FOR ALL ANALYSES--ICPES ONLY PERFORMED

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= VANADIUM

SAMPLE DATE	DAYS A - O		CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.76	0.39	0.38	0.57	0.96	0.3	0.58	0.59	0.035	0.028	0.66	0.7
06AUG79	2	2	0.44	0.33	0.28	0.38	0.88	V	0.47	0.48	0.028	<0.01	0.18	0.59
07AUG79	3	3	0.27	0.33	0.28	0.33	0.59	V	0.22	0.38	0.024	<0.01	0.12	0.59
08AUG79	4	4	V	0.3	0.28	0.31	V	V	0.38	0.39	V	0.022	V	0.56
11AUG79	7	7	0.24	0.32	0.27	0.32	0.47	0.091	0.33	0.36	0.034	<0.01	0.21	0.59
12AUG79	8	8	0.17	0.34	0.21	0.33	0.27	0.15	0.17	0.3	0.037	<0.01	0.16	0.57
14AUG79	10	10	0.26	0.32	0.25	0.31	0.45	0.24	0.21	0.3	0.022	0.029	0.21	0.56
16AUG79	12	12	0.53	0.31	0.3	0.3	0.58	0.27	0.29	0.33	0.036	0.027	0.28	0.55
19AUG79	15	15	0.39	0.33	0.45	0.32	0.48	0.29	0.41	0.35	0.056	0.034	0.51	0.57
24AUG79	20	20	0.39	0.31	0.26	0.31	0.5	0.31	0.45	0.34	0.077	0.042	0.5	0.55
28AUG79	24	24	0.31	0.42	0.31	0.39	0.23	0.45	0.56	0.41	0.11	0.32	0.67	0.61
02SEP79	29	29	0.28	0.4	0.25	0.39	0.25	0.44	0.42	0.43	0.087	0.36	0.48	0.63
09SEP79	36	36	0.46	0.41	0.41	0.39	0.53	0.42	0.56	0.45	0.17	0.14	0.57	0.63
20SEP79	47	47	0.94	0.76	0.92	0.75	1.2	0.76	1	0.86	0.26	0.29	1.4	1.2
29SEP79	56	56	0.78	0.77	0.77	0.74	1	0.74	0.78	0.77	0.3	0.26	1.1	1
14OCT79	71	71	0.5	0.86	0.63	0.87	0.79	1	0.15	0.66	0.19	0.62	0.54	1.2
01NOV79	89	89	0.72	0.82	0.78	0.86	0.66	1	0.23	0.85	0.2	0.62	0.57	1.3
24NOV79	112	112	0.25	0.24	0.34	0.24	0.24	0.36	0.27	0.39	0.33	0.38	0.67	0.56
14DEC79	132	132	0.12	0.34	0.15	0.15	0.086	0.38	0.18	0.37	0.17	0.36	0.4	0.48
17JAN80	166	166	0.056	0.13	0.095	0.14	0.053	0.16	0.064	0.18	0.076	0.14	0.12	0.18
06MAR80	215	215	0.028	0.05	0.058	0.053	0.037	0.073	0.046	0.091	0.082	0.11	0.14	0.19
28APR80	268	268	0.018	0.03	0.012	0.014	0.006	0.027	0.015	0.025	<0.003	0.035	<0.003	0.032
29JUN80	330	330	0.15	0.15	0.12	0.17	0.058	0.077	0.11	0.22	0.046	0.078	0.031	0.2
11SEP80	404	404	0.14	0.24	0.25	0.23	0.22	<0.019	0.06	0.22	0.06	0.06	0.2	0.28
26DEC80	510	510	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
18JUN81	684	549	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
17JUL81	713	578	0.024	0.015	0.099	0.029	<0.015	<0.015	0.046	<0.015	0.092	<0.015	0.11	0.044
17AUG81	744	609	0.19	<0.015	0.017	<0.015	0.13	0.28	0.29	<0.015	0.075	<0.015	<0.015	0.13
17SEP81	775	640	<0.015	<0.015	<0.015	<0.015	<0.015	0.13	0.029	<0.015		<0.015	<0.015	<0.015
19OCT81	807	672	<0.015	<0.015	<0.015	0.07	<0.015	<0.015	<0.015	<0.015	0.026	0.049	<0.015	<0.015

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= ZINC

SAMPLE DATE	DAYS A	DAYS - O	CELL 1 (SHALE) U	CELL 1 (SHALE) L	CELL 2 (SHALE) U	CELL 2 (SHALE) L	CELL 3 (TILL) U	CELL 3 (TILL) L	CELL 4 (LIMESTONE) U	CELL 4 (LIMESTONE) L	CELL 5 (ALLUVIUM) U	CELL 5 (ALLUVIUM) L	CELL 6 (SANDSTONE) U	CELL 6 (SANDSTONE) L
04AUG79	0	0	0.31	0.5	0.02	0.13	0.45	0.33	0.047	0.16	<0.002	0.35	0.13	0.82
06AUG79	2	2	0.057	0.068	0.032	0.069	0.27	V	0.028	0.076	<0.002	0.035	<0.002	0.33
07AUG79	3	3	0.005	0.066	0.025	0.057	0.089	V	<0.002	0.072	<0.002	0.024	<0.002	0.34
08AUG79	4	4	V	0.043	0.055	0.045	V	V	0.059	0.065	V	0.04	V	0.28
11AUG79	7	7	0.03	0.043	0.054	0.048	0.046	0.08	0.011	0.057	<0.002	0.034	<0.002	0.29
12AUG79	8	8	0.026	0.045	0.056	0.052	0.022	0.028	<0.002	0.043	<0.002	0.023	<0.002	0.23
14AUG79	10	10	0.02	0.025	0.1	0.032	0.047	0.028	0.0027	0.039	<0.002	0.024	<0.002	0.23
16AUG79	12	12	0.087	0.023	0.16	0.038	0.098	0.023	0.014	0.048	<0.002	0.027	0.0046	0.24
19AUG79	15	15	0.042	0.028	0.12	0.037	0.055	0.021	0.049	0.049	<0.002	0.044	0.053	0.24
24AUG79	20	20	0.043	0.024	0.053	0.037	0.083	0.028	0.068	0.053	<0.002	0.047	0.041	0.21
28AUG79	24	24	0.061	0.052	0.059	0.061	0.031	0.057	0.095	0.06	0.015	0.096	0.072	0.18
02SEP79	29	29	0.032	0.057	0.081	0.054	0.03	0.057	0.083	0.074	0.017	0.098	0.043	0.2
09SEP79	36	36	0.063	0.068	0.17	0.057	0.065	0.064	0.096	0.11	0.019	0.086	0.057	0.18
20SEP79	47	47	0.062	0.061	0.23	0.055	0.071	0.044	0.06	0.13	0.011	0.086	0.078	0.15
29SEP79	56	56	0.045	0.038	0.11	0.034	0.05	0.035	0.047	0.071	0.017	0.072	0.04	0.097
14OCT79	71	71	0.07	0.057	0.24	0.41	0.068	0.071	0.067	0.1	0.033	0.14	0.029	0.11
01NOV79	89	89	0.064	0.057	0.27	0.084	0.068	0.074	0.066	0.53	0.033	0.28	0.026	0.13
24NOV79	112	112	0.46	0.52	1.1	0.62	0.62	0.81	0.66	0.91	0.76	1.2	1.3	1.5
14DEC79	132	132	0.65	0.92	1.1	1	0.65	1.2	0.89	1.4	0.83	1.6	1.2	1.8
17JAN80	166	166	0.12	0.2	0.39	0.21	0.035	0.26	0.064	0.24	0.062	0.35	0.2	0.44
06MAR80	215	215	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013
28APR80	268	268	0.027	0.051	0.089	0.091	0.006	0.06	0.061	0.094	<0.003	0.15	0.052	0.12
29JUN80	330	330	0.043	0.075	0.13	0.097	0.045	0.079	0.064	0.13	<0.009	0.13	0.052	0.13
11SEP80	404	404	0.04	0.12	0.14	0.14	0.04	0.14	0.03	0.19	0.02	0.11	0.05	0.16
26DEC80	510	510	0.04	0.068	0.07	0.11	<0.003	0.1	0.075	0.11	<0.003	0.085	0.095	0.1
18JUN81	684	549	0.082	0.14	0.14	0.12	0.075	0.14	0.094	0.15	0.044	0.14	0.1	0.16
17JUL81	713	578	0.017	0.094	0.063	0.11	<0.015	0.08	<0.015	0.12	0.03	0.11	0.026	0.11
17AUG81	744	609	0.062	0.47	0.025	0.066	0.42	0.23	0.057	0.34	0.016	0.13	0.02	0.35
17SEP81	775	640	0.11	0.14	0.069	0.083	0.11	0.11	0.28	0.25		0.15	0.21	0.17
19OCT81	807	672	0.03	<0.015	0.035	<0.015	0.017	<0.015	0.041	0.2	0.061	0.051	0.092	0.085

J.11 Analysis of Leachates from the Alliance AFBC Field Cells

The chemical analytical data for the Alliance AFBC field cells (Cells 13 to 17) are formulated in the same manner as the Exxon PFBC field cell data. The elapsed days of operation are identical for the day (A) and day (O) entries because there was no break in the operation of the AFBC field cells.

PARAMETER= ALUMINUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	0.82	0.11			V	V	0.99	2.8	1.8	3
22MAR80	1	1	2.1	720			1.9	V	0.81	1.4	0.62	V
23MAR80	2	2	1.1	820			0.85	V	0.83	2.2	1.1	3
24MAR80	3	3	V	0.1			0.89	V	0.95	1.1	1.6	2.4
26MAR80	5	5	0.71	0.13	1	V	0.42	0.85	0.59	1.2	<0.23	1.3
28MAR80	7	7	V	V	0.8	V	1.1	1.9	<0.23	1.5	0.74	2.9
31MAR80	10	10	0.83	970	1.2	1.1	1.1	1.6	1.6	2.5	1.5	3.2
04APR80	14	14	1.8	530	2.1	2.4	1.1	1.4	0.79	1.8	1	3
10APR80	20	20	1.3	690	1.5	1.6	1.1	1.6	1.3	2.6	1.2	3.1
19APR80	29	29	0.62	0.1	0.7	1	0.55	1.3	0.43	1.5	2.6	0.32
12MAY80	52	52	0.65	0.3	V	0.87	0.41	0.95	0.31	2.1	2.5	0.49
20MAY80	60	60	V	0.27	V	0.98	V	1.1	0.75	2.2	3.3	0.25
12JUN80	83	83	0.16	1000	V	0.93	0.55	0.61	0.36	1.9	0.16	2.7
23JUL80	124	124	0.12	1100	V	0.66	0.5	0.27	<0.05	1.8	0.12	1.6
03SEP80	166	166	0.89	660	1.1	0.73	0.25	0.37	0.27	1.4	0.35	2.8
20OCT80	213	213	<0.05	780	<0.05	1.5	V	0.26	<0.05	0.9	<0.05	1.4
28NOV80	252	252	<0.05	610	<0.05	0.39	<0.05	0.2	<0.05	0.93	<0.05	1.4
03FEB81	319	319	<0.1	800		38		23	<0.1	50	<0.1	99
24APR81	399	399	<0.25	390	<0.25	0.26	0.86	0.82	<0.25	2.1	<0.25	2.2
18JUN81	454	454	0.41	170		2.3		1.4	0.37	2.6	0.68	3.1
17JUL81	483	483	1	160	0.97	0.81		1.2	0.88	1.4	<0.25	2.1
17AUG81	514	514	0.77	190		0.59	0.64	0.87	1	2.2	1	2.2
17SEP81	545	545	0.25	160		<0.25		<0.25	<0.25	0.69	0.33	2
19OCT81	577	577	<0.25	230	1.1	1.6		1.4	1.7	0.97	1.5	1.9

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= ANTIMONY

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	<0.01	<0.01			V	V	<0.01	<0.01	<0.01	<0.01
22MAR80	1	1	<0.01	<0.01			<0.01	V	<0.01	<0.01	<0.01	V
23MAR80	2	2	<0.01	<0.01			<0.01	V	<0.01	<0.01	<0.01	<0.01
24MAR80	3	3	V	<0.01			<0.01	V	<0.01	<0.01	<0.01	<0.01
26MAR80	5	5	<0.01	<0.01	<0.01	V	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
28MAR80	7	7	V	V	<0.01	V	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
31MAR80	10	10	D	D	D	D	D	D	D	D	D	D
04APR80	14	14	D	D	D	D	D	D	D	D	D	D
10APR80	20	20	D	D	D	D	D	D	D	D	D	D
19APR80	29	29	D	D	D	D	D	D	D	D	D	D
12MAY80	52	52	D	D	D	D	D	D	D	D	D	D
20MAY80	60	60	D	D	D	D	D	D	D	D	D	D
12JUN80	83	83	D	D	D	D	D	D	D	D	D	D
23JUL80	124	124	D	D	D	D	D	D	D	D	D	D
03SEP80	166	166	D	D	D	D	D	D	D	D	D	D
200CT80	213	213	D	D	D	D	D	D	D	D	D	D
28NOV80	252	252	D	D	D	D	D	D	D	D	D	D
03FEB81	319	319	D	D		D		D	D	D	D	D
24APR81	399	399	D	D	D	D	D	D	D	D	D	D
18JUN81	454	454	D	D		D		D	D	D	D	D
17JUL81	488	483	D	D	D	D		D	D	D	D	D
17AUG81	514	514	D	D		D	D	D	D	D	D	D
17SEP81	545	545	D	D		D		D	D	D	D	D
190CT81	577	577	D	D	D	D		D	D	D	D	D

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

D=DISCONTINUED AFTER DL REACHED

PARAMETER= ARSENIC

SAMPLE DATE	DAYS A	DAYS D	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	<0.002	1.9			V	V	<0.002	<0.002	<0.002	<0.002
22MAR80	1	1	<0.002	0.64			<0.002	V	<0.002	<0.002	<0.002	V
23MAR80	2	2	<0.002	1			<0.002	V	<0.002	<0.002	<0.002	<0.002
24MAR80	3	3	V	0.92			<0.002	V	<0.002	<0.002	<0.002	<0.002
26MAR80	5	5	<0.002	1.1	<0.002	V	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
28MAR80	7	7	V	V	<0.002	V	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
31MAR80	10	10	<0.002	0.65	D	D	D	D	D	D	D	D
04APR80	14	14	0.004	0.3	D	D	D	D	D	D	D	D
10APR80	20	20	<0.002	0.38	D	D	D	D	D	D	D	D
19APR80	29	29	D	D	D	D	D	D	D	D	D	D
12MAY80	52	52	D	D	D	D	D	D	D	D	D	D
20MAY80	60	60	D	D	D	D	D	D	D	D	D	D
12JUN80	83	83	D	D	D	D	D	D	D	D	D	D
23JUL80	124	124	D	D	D	D	D	D	D	D	D	D
03SEP80	166	166	D	D	D	D	D	D	D	D	D	D
20OCT80	213	213	D	D	D	D	D	D	D	D	D	D
28NOV80	252	252	D	D	D	D	D	D	D	D	D	D
03FEB81	319	319	D	D		D		D	D	D	D	D
24APR81	399	399	D	D	D	D	D	D	D	D	D	D
18JUN81	454	454	D	D		D		D	D	D	D	D
17JUL81	483	483	D	D	D	D		D	D	D	D	D
17AUG81	514	514	D	D		D	D	D	D	D	D	D
17SEP81	545	545	D	D		D		D	D	D	D	D
19OCT81	577	577	D	D	D	D		D	D	D	D	D

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

D=DISCONTINUED AFTER DL REACHED

PARAMETER= BARIUM

SAMPLE DATE	DAYS A - 0	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	0.54	0.028			V	V	0.22	0.72	0.53	0.1
22MAR80	1	1	0.51	0.094			0.47	V	0.61	0.39	0.4	V
23MAR80	2	2	0.46	0.062			0.37	V	0.47	0.64	0.78	0.58
24MAR80	3	3	V	0.21			0.51	V	0.48	0.076	0.82	0.29
26MAR80	5	5	0.27	0.16	0.8	V	0.58	0.42	0.42	0.2	<0.002	<0.002
28MAR80	7	7	V	V	0.077	V	0.041	0.036	0.21	0.22	0.28	0.48
31MAR80	10	10	0.42	0.32	0.55	0.54	0.58	0.86	0.76	0.53	0.56	0.4
04APR80	14	14	0.41	0.64	0.73	0.63	0.69	0.9	0.52	0.41	0.62	0.58
10APR80	20	20	0.21	0.14	0.45	0.45	0.69	1	0.61	0.43	0.34	0.26
19APR80	29	29	0.63	0.38	0.81	0.88	0.75	1.5	0.67	0.58	0.58	0.63
12MAY80	52	52	0.7	0.31	V	0.98	0.68	1.2	0.54	0.66	0.43	0.51
20MAY80	60	60	V	0.31	V	1	V	1.1	0.69	0.5	0.76	0.51
12JUN80	83	83	0.16	0.1	V	0.84	0.53	0.48	0.38	0.31	0.28	0.15
23JUL80	124	124	0.14	0.1	V	0.79	0.58	0.25	0.36	0.31	0.24	0.15
03SEP80	166	166	0.05	<0.001	0.34	0.52	0.05	0.25	0.006	0.01	<0.001	<0.001
20OCT80	213	213	0.032	<0.001	0.061	0.13	V	0.25	0.021	0.012	0.02	0.018
28NOV80	252	252	0.019	<0.001	0.052	0.078	0.07	0.25	0.013	0.007	0.017	0.016
03FEB81	319	319	0.011	<0.002		<0.002		0.51	0.028	<0.002	0.038	0.021
24APR81	399	399	0.034	<0.005	<0.005	0.013	1.2	1.7	0.022	1.2	0.027	0.017
18JUN81	454	454	0.55	0.35		0.88		0.62	0.37	0.82	0.61	0.55
17JUL81	488	483	0.4	<0.003	0.32	0.28		0.43	0.27	0.26	0.31	0.27
17AUG81	514	514	0.31	0.33		0.35	0.29	0.38	0.36	0.29	0.28	0.31
17SEP81	545	545	0.64	0.59		0.71		0.71	0.68	0.65	0.67	0.63
19OCT81	577	577	1.1	0.85	1.2	1.1		1.2	0.98	1	1.3	0.99

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER: BERYLLIUM

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	<0.005	<0.005			V	V	<0.001	0.003	0.003	0.005
22MAR80	1	1	<0.005	<0.005			0.005	V	<0.001	<0.001	<0.001	V
23MAR80	2	2	<0.005	<0.005			<0.001	V	<0.001	<0.001	<0.001	<0.001
24MAR80	3	3	V	<0.005			<0.001	V	<0.001	0.005	0.003	<0.001
26MAR80	5	5	<0.005	<0.005	<0.001	V	<0.001	<0.001	<0.001	<0.001	0.002	0.002
28MAR80	7	7	V	V	<0.001	V	<0.001	<0.001	<0.001	<0.001	0.003	<0.001
31MAR80	10	10	<0.005	<0.005	<0.001	<0.001	<0.001	0.002	0.002	0.004	0.004	0.005
04APR80	14	14	<0.005	<0.005	0.006	0.009	<0.001	<0.001	<0.001	0.002	<0.001	<0.001
10APR80	20	20	<0.005	<0.005	<0.001	<0.001	<0.001	0.002	0.002	0.006	0.005	0.007
19APR80	29	29	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12MAY80	52	52	<0.005	<0.005	V	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
20MAY80	60	60	V	<0.005	V	<0.001	V	<0.001	<0.001	<0.001	<0.001	<0.001
12JUN80	83	83	<0.001	<0.001	V	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
23JUL80	124	124	<0.001	<0.001	V	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
03SEP80	166	166	<.0005	0.64	<0.005	<.0005	100E-5	<.0005	100E-5	0.005	0.002	0.01
20OCT80	213	213	<.0005	0.64	<.0005	<.0005	V	<.0005	<.0005	<.0005	<.0005	<.0005
28NOV80	252	252	<.0005	0.43	<.0005	<.0005	<.0005	<.0005	<.0005	<.0005	<.0005	<.0005
03FEB81	319	319	<0.001	<0.001		<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
24APR81	399	399	<0.002	0.21	<0.002	0.005	<0.002	0.008	<0.002	<0.002	<0.002	<0.002
18JUN81	454	454	<0.002	0.067		<0.002		<0.002	<0.002	<0.002	<0.002	<0.002
17JUL81	483	483	<0.002	0.11	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002
17AUG81	514	514	<0.002	0.23		<0.002	<0.002	<0.002	<0.002	<0.002	0.006	<0.002
17SEP81	545	545	<0.002	1.1		<0.002		<0.002	<0.002	<0.002	<0.002	<0.002
19OCT81	577	577	<0.002	0.01	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= BORON

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0					V	V	0.95	2.4	1.9	1.3
22MAR80	1	1	1.1	5			1.9	V	1.3	1.3	0.93	V
23MAR80	2	2	1.9	4.2			0.92	V	1.3	2.1	1.5	1.8
24MAR80	3	3	1.2	4.2			1.1	V	0.94	0.79	1.6	0.94
26MAR80	5	5	V	5.2			1	1	0.76	1	<0.036	0.39
28MAR80	7	7	0.82	6	1.3	V	1.2	1.4	0.23	1.3	0.84	1.5
31MAR80	10	10	V	V	0.93	V	1.1	1.4	1.9	2.3	1.4	1.6
04APR80	14	14	1	4.7	1	1.1	1.4	1.6	0.97	1.6	1.2	2.1
10APR80	20	20	1.6	4.6	2.3	2.1	1.7	1.6	1.6	2.2	1	1.8
19APR80	29	29	0.87	3.3	1.2	0.78	0.58	0.74	0.23	1.7	1.9	0.28
12MAY80	52	52	0.34	25	<0.027	0.62	<0.027	0.15	0.4	2.2	1.4	0.46
20MAY80	60	60	0.34	95	V	0.66	V	0.51	0.68	2.3	2.3	<0.027
12JUN80	83	83	V	88	V	0.13	1.1	0.47	0.7	3.3	0.57	3.5
23JUL80	124	124	0.59	23	V	0.43	1	0.42	0.63	0.9	0.48	2.7
03SEP80	168	166	<0.085	13	V	0.045	0.92	<0.012	1	3	1.1	5.3
20OCT80	213	213	<0.012	12	2.6	0.07	V	<0.009	<0.009	0.42	0.012	<0.009
28NOV80	252	252	0.11	0.34	0.11	<0.009	0.34	<0.009	<0.009	0.41	<0.009	<0.009
03FEB81	319	319	<0.009	0.39	0.11	<0.009		110	110	130	120	130
24APR81	399	399	58	380		92	0.89	0.47	1.1	0.97	0.85	1.2
18JUN81	454	454	1.5	2.3	<0.05	<0.05		1	0.71	2.4	1.3	1.5
07JUL81	488	483	1.2	1.7		2		0.29	0.19	0.54	0.065	0.23
17AUG81	514	514	0.26	0.85	0.19	0.32	0.32	<0.045	0.61	1.1	1	0.89
17SEP81	545	545	0.24	1.7		<0.045		1.2	4.3	5.4	4.4	8.2
19OCT81	577	577	3.8	16		1.8		2.8	2.3	3.2	3.3	2.8
			3	2.9	2.4	2.7						

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= CADMIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	<0.025	1.3			V	V	0.027	0.04	0.045	0.06
22MAR80	1	1	0.059	0.93			0.064	V	<0.025	<0.025	<0.025	V
23MAR80	2	2	<0.025	1.1			<0.025	V	<0.025	<0.025	<0.025	<0.025
24MAR80	3	3	V	1.3			<0.025	V	<0.025	0.034	<0.025	<0.025
26MAR80	5	5	<0.025	1.6	<0.025	V	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
28MAR80	7	7	V	V	0.044	V	0.064	0.089	<0.025	<0.025	<0.025	<0.025
31MAR80	10	10	<0.025	1.2	<0.025	<0.025	<0.025	<0.025	<0.025	0.04	0.041	0.045
04APR80	14	14	0.057	0.69	0.059	0.074	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
10APR80	20	20	0.043	0.78	<0.025	<0.025	<0.025	<0.025	<0.025	0.034	0.029	0.041
19APR80	29	29	<0.025	1.1	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
12MAY80	52	52	<0.025	3.3	V	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
20MAY80	60	60	V	3.1	V	<0.025	V	<0.025	<0.025	<0.025	<0.025	<0.025
12JUN80	83	83	<0.025	0.97	V	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
23JUL80	124	124	<0.008	0.52	V	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
03SEP80	168	166	<0.008	0.66	<0.004	<0.008	0.011	<0.008	0.01	0.03	0.01	0.06
20OCT80	213	213	<0.008	0.61	<0.008	<0.008	V	<0.008	<0.008	<0.008	<0.008	<0.008
29NOV80	252	252	<0.008	0.45	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
03FEB81	319	319	<0.016	<0.016		<0.016		<0.016	<0.016	<0.016	<0.016	<0.016
24APR81	399	399	<0.04	0.088	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
18JUN81	454	454	<0.04	<0.04		<0.04		<0.04	<0.04	<0.04	<0.04	<0.04
17JUL81	483	483	<0.042	0.062	<0.042	<0.042		<0.042	<0.042	<0.042	<0.042	<0.042
17AUG81	514	514	<0.042	<0.042		<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042
17SEP81	545	545	<0.042	<0.042		<0.042		<0.042	<0.042	<0.042	<0.042	<0.042
19OCT81	577	577	<0.01	0.02	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER: CALCIUM

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	0.17	520			V	V	0.18	920	0.2	810
22MAR80	1	1	0.14	540			0.15	V	0.15	760	0.12	V
23MAR80	2	2	0.11	530			0.13	V	0.14	950	0.16	960
24MAR80	3	3	V	660			0.13	V	0.13	460	0.14	800
26MAR80	5	5	870	750	0.19	V	0.23	180	0.1	690	540	520
28MAR80	7	7	V	V	0.12	V	0.17	43	890	890	0.12	970
31MAR80	10	10	800	660	0.13	87	0.16	93	0.13	780	0.13	840
04APR80	14	14	720	670	0.12	31	0.15	160	0.13	740	0.13	920
10APR80	20	20	280	580	840	35	0.13	190	0.13	660	0.11	770
19APR80	29	29	670	730	980	94	0.14	330	0.11	870	0.1	940
12MAY80	52	52	410	720	V	150	540	290	660	920	0.11	620
20MAY80	60	60	V	680	V	150	V	310	780	940	0.13	860
12JUN80	83	83	170	510	V	220	330	210	180	660	260	870
23JUL80	124	124	130	600	V	320	400	180	160	560	93	770
03SEP80	166	166	150	500	340	290	320	190	190	480	260	650
200CT80	213	213	68	460	97	220	V	170	260	450	340	610
28NOV80	252	252	170	450	100	220	280	180	270	450	400	610
03FEB81	319	319	98	460		240		180	280	380	490	690
24APR81	399	399	260	520	31	320	180	180	390	380	540	650
18JUN81	454	454	380	560		300		210	450	320	560	660
17JUL81	483	483	390	480	85	220		200	450	250	470	580
17AUG81	514	514	390	520		170	26	200	440	250	420	610
17SEP81	545	545	380	520		150		200	440	240	480	670
190CT81	577	577	510	630	380	190		260	420	260	690	770

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= CHLORIDES

SAMPLE DATE	DAYS A - O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	900	1200			V	V	470	910	710	710
22MAR80	1	610	1800			2300	V	430	800	1200	V
23MAR80	2	590	E			4600	V	410	890	1100	590
24MAR80	3	V	1200			1300	V	420	870	1100	580
26MAR80	5	590	1300	3400	V	890	150	450	800	1100	560
28MAR80	7	V	V	2100	V	510	37	480	790	980	580
31MAR80	10	520	1500	2600	67	360	130	400	870	1400	590
04APR80	14	360	1300	1800	22	260	350	260	720	990	680
10APR80	20	360	650	1500	32	230	440	210	640	840	600
19APR80	29	260	510	770	180	200	420	160	350	490	600
12MAY80	52	240	240	V	190	240	520	170	350	380	560
20MAY80	60	V	.	V	190	V	430	170	360	390	520
12JUN80	83	160	110	V	450	310	370	160	210	340	480
23JUL80	124	120	91	V	850	340	360	100	150	160	360
03SEP80	166	68	31	130	610	340	410	62	90	37	180
20OCT80	213	60	13	170	460	V	430	40	86	30	100
28NOV80	252	67	13	140	310	310	380	38	84	33	83
03FEB81	319	98	13		270		390	36	50	35	40
24APR81	399	150	66	140	170	290	350	45	80	99	74
18JUN81	454	150	41		170		310	110	71	86	100
17JUL81	483	85	27	150	140		310	98	81	64	97
17AUG81	514	66	28		130	220	290	91	95	37	82
17SEP81	545	58	8.6		130		280	86	98	22	63
19OCT81	577	46	15	79	120		270	70	92	16	47

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= CHROMIUM

SAMPLE DATE	DAYS A	DAYS D	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	0.13	<0.022								
22MAR80	1	1	0.28	<0.022			V	V	0.21	0.22	0.27	0.18
23MAR80	2	2	0.16	<0.022			0.36	V	0.14	0.11	0.12	V
24MAR80	3	3	V	<0.022			0.19	V	0.13	0.13	0.17	0.084
26MAR80	5	5	0.13	<0.022	0.27	V	0.18	V	0.17	0.12	0.2	0.057
28MAR80	7	7	V	V	0.31	V	0.2	<0.022	0.12	0.056	0.085	0.056
31MAR80	10	10	0.12	<0.003	0.17	0.089	0.37	0.27	0.12	0.059	0.19	0.06
04APR80	14	14	0.25	0.44	0.25	0.17	0.15	0.043	0.19	0.12	0.22	0.14
10APR80	20	20	0.	<0.003	0.11	0.041	0.11	0.033	0.14	0.075	0.11	0.062
19APR80	29	29	0.074	<0.003	0.039	<0.003	0.13	0.079	0.21	0.17	0.21	0.19
12MAY80	52	52	0.04	<0.003	V	0.004	0.072	0.011	0.12	0.015	0.035	0.081
20MAY80	60	60	V	<0.003	V	<0.003	0.066	<0.003	0.12	0.012	0.021	0.024
12JUN80	83	83	<0.003	<0.003	V	<0.003	V	0.014	0.11	0.017	0.025	0.008
23JUL80	124	124	<0.001	<0.001	V	0.008	0.051	<0.003	0.014	0.014	<0.003	<0.003
03SEP80	166	166	<0.007	<0.007	0.12	0.01	0.051	0.003	<0.001	0.018	<0.001	<0.001
20OCT80	213	213	<0.001	1.2	0.014	0.005	0.08	0.008	0.03	0.1	0.05	0.19
28NOV80	252	252	<0.001	1	0.046	<0.001	V	0.003	<0.001	<0.001	<0.001	<0.001
03FEB81	319	319	<0.002	<0.002		0.01	0.014	<0.001	<0.001	<0.001	<0.001	<0.001
24APR81	399	399	0.018	0.36	<0.005	<0.005	<0.005	0.004	<0.002	<0.002	<0.002	0.017
18JUN81	454	454	0.11	0.39		0.13		<0.005	<0.005	<0.005	<0.005	0.024
17JUL81	483	483	0.032	0.28	0.049	<0.005		0.12	0.098	0.13	0.11	0.15
17AUG81	514	514	<0.005	0.32		<0.005	<0.005	0.008	0.017	<0.005	<0.005	0.006
17SEP81	545	545	<0.005	0.18		<0.005		<0.005	0.042	0.025	0.046	<0.005
19OCT81	577	577	<0.005	0.02	0.064	<0.03		<0.005	<0.005	<0.005	0.018	0.038
								0.013	<0.005	<0.005	0.011	0.013

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= COBALT

SAMPLE DATE	DAYS A - O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	<0.033	14			V	V	0.053	0.086	0.094	0.11
22MAR80	1	0.12	10			0.11	V	<0.033	<0.033	<0.033	V
23MAR80	2	<0.033	12			<0.033	V	<0.033	<0.033	<0.033	<0.033
24MAR80	3	V	15			<0.033	V	<0.033	0.052	<0.033	<0.033
26MAR80	5	<0.033	18	<0.033	V	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033
28MAR80	7	V	V	0.062	V	0.097	0.14	<0.033	<0.033	0.04	<0.033
31MAR80	10	<0.018	13	<0.018	<0.018	<0.018	0.025	0.028	0.057	0.057	0.069
04APR80	14	0.087	7.5	0.08	0.11	<0.018	0.018	<0.018	0.04	<0.018	<0.018
10APR80	20	0.082	8.8	<0.018	<0.018	<0.018	<0.018	<0.018	0.074	0.051	0.076
19APR80	29	<0.018	14	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
12MAY80	52	<0.018	34	V	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
20MAY80	60	V	31	V	<0.018	V	<0.018	<0.018	<0.018	<0.018	<0.018
12JUN80	83	<0.018	11	V	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
23JUL80	124	<0.006	4.9	V	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
03SEP80	166	<0.011	7.3	<0.11	<0.011	0.02	<0.011	0.01	0.06	0.03	0.12
20OCT80	213	<0.0006	8.1	<0.006	<0.006	V	<0.006	<0.006	<0.006	<0.006	<0.006
28NOV80	252	<0.006	5.4	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
03FEB81	319	<0.012	4.6		<0.012		<0.012	<0.012	<0.012	<0.012	<0.012
24APR81	399	<0.03	2.4	<0.03	<0.03	<0.03	0.03	<0.03	<0.03	<0.03	<0.03
18JUN81	454	<0.03	0.77		<0.03		<0.03	<0.03	<0.03	<0.03	<0.03
17JUL81	488	<0.03	1.1	<0.03	<0.03		<0.03	<0.03	<0.03	<0.03	<0.03
17AUG81	514	<0.03	1.2		<0.03		<0.03	<0.03	0.036	0.049	<0.03
17SEP81	545	<0.03	0.82		<0.03		<0.03	<0.03	<0.03	<0.03	<0.03
19OCT81	577	<0.03	0.74	<0.03	<0.03		<0.03	<0.03	<0.03	<0.03	<0.03

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= CONDUCTIVITY

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	10800	13000			V	V	10000	5200	9900	4200
22MAR80	1	1	6200	11000			12000	V	7000	5000	6900	V
23MAR80	2	2	5600	E			8300	V	7500	5300	7000	4000
24MAR80	3	3	V	13000			6400	V	5800	4300	5200	3700
26MAR80	5	5	3900	13000	13000	V	9900	1100	5500	4600	4800	3800
28MAR80	7	7	V	V	8200	V	8300	310	3500	4700	5000	3600
31MAR80	10	10	3500	10000	8300	560	8400	510	6600	4800	6100	3600
04APR80	14	14	8200	7300	6800	260	7600	1300	7300	4200	6000	4000
10APR80	20	20	3000	8600	5700	280	7400	1400	7400	4200	5200	3700
19APR80	29	29	3100	9500	5200	510	7300	1600	5900	4100	4000	4000
12MAY80	52	52	3400	15000	V	820	3000	1800	3900	5300	4100	4100
20MAY80	60	60	V	•	V	840	V	1500	3800	5600	4100	4000
12JUN80	83	83	3600	11000	V	1600	3000	1600	4600	4200	5000	4200
23JUL80	124	124	3500	9000	V	2400	4000	1400	4200	5000	5700	3900
03SEP80	166	166	4000	10000	6500	2200	4400	1600	3900	4100	2700	4100
20OCT80	213	213	3800	9400	1700	1800	V	1500	3400	4600	3000	3800
28NOV80	252	252	2700	8400	4200	1600	5400	1400	2800	4100	2500	3400
03FEB81	319	319	6200	8700		1800		1400	2600	4000	2300	3500
24APR81	399	399	2500	6900	3800	2200	5800	1400	2500	3600	•	3400
18JUN81	454	454	2200	5100		2000		1500	2400	3100	2300	3300
17JUL81	488	483	2300	6500	2800	1900		1600	2500	3100	2300	3300
17AUG81	514	514	2200	5700		1600	4600	1700	2500	3000	2100	3400
17SEP81	545	545	1900	4800		1100		1500	2200	2700	2200	3800
19OCT81	577	577	2200	5700	2100	1200		1600	2300	3000	2000	3300

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= COPPER

SAMPLE DATE	DAYS A	DAYS - O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	0.017	22			V	V	0.072	0.11	0.13	0.14
22MAR80	1	1	0.15	15			0.16	V	0.027	0.025	0.043	V
23MAR80	2	2	0.042	17			0.035	V	0.028	0.042	0.064	0.036
24MAR80	3	3	V	21			0.003	V	0.064	0.063	0.11	0.024
26MAR80	5	5	0.033	27	0.031	V	<0.003	0.02	0.036	0.011	0.037	0.028
28MAR80	7	7	V	V	0.1	V	0.16	0.2	0.057	0.025	0.11	0.054
31MAR80	10	10	0.01	23	0.039	0.018	0.038	0.048	0.087	0.095	0.13	0.11
04APR80	14	14	0.14	12	0.15	0.17	0.029	0.035	0.041	0.13	0.039	0.035
10APR80	20	20	0.14	16	0.02	0.013	0.022	0.035	0.068	0.1	0.1	0.12
19APR80	29	29	0.006	24	0.009	<0.003	0.006	0.011	<0.003	<0.003	<0.003	0.026
12MAY80	52	52	<0.003	68	V	<0.003	0.038	<0.003	<0.003	<0.003	<0.003	<0.003
20MAY80	60	60	V	61	V	<0.003	V	<0.003	0.005	<0.003	<0.003	<0.003
12JUN80	83	83	<0.003	20	V	<0.003	0.025	<0.003	<0.003	<0.003	<0.003	0.1
23JUL80	124	124	<0.001	11	V	0.025	0.013	0.016	<0.001	0.011	<0.001	0.051
03SEP80	168	166	<0.001	15	0.1	0.01	0.03	0.003	0.01	0.09	0.03	0.2
20OCT80	213	213	<0.001	18	0.003	0.033	V	0.005	<0.001	<0.001	<0.001	<0.001
28NOV80	252	252	<0.001	12	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
03FEB81	319	319	<0.002	<0.002		0.009		0.008	<0.002	<0.002	<0.002	<0.002
24APR81	399	399	<0.005	6.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
18JUN81	454	454	0.012	3.3		0.023		<0.005	<0.005	<0.005	0.007	<0.005
17JUL81	483	483	<0.005	3.9	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
17AUG81	514	514	0.01	3.2		<0.005	<0.005	<0.005	0.095	0.076	0.13	<0.005
17SEP81	545	545	<0.005	2.7		<0.005		<0.005	<0.005	<0.005	0.015	0.015
19OCT81	577	577	<0.005	0.48	<0.005	0.035		<0.005	<0.005	<0.005	<0.005	<0.005

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= FLUORIDES

SAMPLE DATE	DAYS A - C	CELL 13 (WATERBURGEN) U	CELL 13 (WATERBURGEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0 0	0.3	3.8			V	V	0.25	1.9	0.23	0.25
22MAR80	1 1	0.14	3.5			0.12	V	0.1	0.9	0.12	V
23MAR80	2 2	0.18	E			0.21	V	0.14	0.85	0.13	0.18
24MAR80	3 3	V	4.3			0.2	V	0.11	0.92	0.13	0.23
26MAR80	5 5	0.25	5.1	0.17	V	0.19	0.24	0.11	0.92	0.16	0.25
28MAR80	7 7	V	V	0.12	V	0.17	0.2	0.15	1.1	0.17	0.19
31MAR80	10 10	0.13	3.8	0.17	0.23	0.15	0.15	0.2	1.1	0.18	0.26
04APR80	14 14	0.14	2.5	0.14	0.12	0.31	0.14	0.19	0.87	0.15	0.18
10APR80	20 20	0.13	2.9	0.19	0.07	0.17	0.12	0.21	0.57	0.11	0.21
19APR80	29 29	0.22	4.2	0.21	0.14	0.18	0.15	0.21	0.69	0.15	0.21
12MAY80	52 52	0.21	6.9	V	0.14	0.2	0.12	0.15	1.1	0.13	0.18
20MAY80	60 60	V	.	V	0.07	V	0.07	0.15	1.1	0.09	0.19
12JUN80	83 83	0.15	3.7	V	0.1	0.11	0.1	0.19	1	0.22	0.19
23JUL80	124 124	0.3	4	V	0.13	0.18	0.1	0.22	1.4	0.29	0.19
03SEP80	166 166	0.33	7.6	0.16	0.17	0.34	0.18	0.59	1	0.31	0.37
20OCT80	213 213	0.31	5.3	0.16	0.64	V	0.09	0.15	1.3	0.14	0.15
28NOV80	252 252	0.15	3.3	0.11	0.09	0.17	0.11	0.38	1.5	0.11	0.16
03FEB81	319 319	0.28	2.8		0.08		0.07	0.12	1.2	0.1	0.13
24APR81	399 399	0.14	2.7	0.19	0.11	0.33	0.05	0.1	1.2	0.25	0.09
18JUN81	454 454	0.23	2.5		0.11		0.05	0.2	1.3	0.27	0.09
17JUL81	483 483	0.22	2.8	0.12	0.11		0.09	0.19	1.4	0.28	0.08
17AUG81	514 514	0.18	2.8		0.09	0.09	0.48	0.16	1.4	0.28	0.09
17SEP81	545 545	0.22	2.5		0.09		0.06	0.13	1.4	0.21	0.19
19OCT81	577 577	0.15	2.5	0.13	0.08		0.1	0.14	1.6	0.19	0.21

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= IRON

SAMPLE DATE	DAYS A	DAYS - O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	0.023	1600			V	V	0.44	0.54	0.11	0.1
22MAR80	1	1	0.13	1700			0.44	V	<0.023	<0.023	<0.023	V
23MAR80	2	2	0.023	1700			0.53	V	<0.023	0.085	<0.023	<0.023
24MAR80	3	3	V	1600			0.53	V	0.087	0.04	0.033	0.046
26MAR80	5	5	0.051	1700	0.66	V	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023
28MAR80	7	7	V	V	<0.023	V	<0.023	<0.023	<0.023	0.024	0.027	0.032
31MAR80	10	10	0.069	1700	2.8	0.83	0.42	0.37	0.33	0.34	0.28	0.25
04APR80	14	14	0.25	1400	1.4	0.7	0.53	0.41	0.33	0.36	0.22	0.31
10APR80	20	20	0.082	1700	3.6	2	0.19	0.12	0.072	0.12	0.066	0.081
19APR80	29	29	0.16	0.15	0.96	0.61	0.099	0.14	<0.023	0.031	0.034	0.045
12MAY80	52	52	0.19	1500	V	0.16	0.062	0.057	0.028	0.058	0.035	<0.023
20MAY80	60	60	V	1600	V	0.3	V	0.069	0.13	0.052	<0.023	<0.023
12JUN80	83	83	0.6	1600	V	0.59	0.18	0.066	0.04	0.031	<0.023	0.87
23JUL80	124	124	0.66	1900	V	0.33	0.19	0.062	0.036	0.03	0.35	0.83
03SEP80	166	166	0.31	2100	1.2	0.12	0.06	0.02	0.02	0.05	0.04	0.08
20OCT80	213	213	0.27	1300	0.24	2.5	V	<0.008	<0.008	<0.008	<0.008	<0.008
28NOV80	252	252	0.27	1200	0.29	2	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
03FEB81	319	319	0.39	1300		0.84		0.22	0.23	0.18	0.21	0.18
24APR81	399	399	<0.04	960	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
18JUN81	454	454	<0.04	500		0.6		0.13	<0.04	0.072	<0.04	0.044
17JUL81	483	483	0.071	480	<0.038	0.086		0.067	<0.038	<0.038	<0.038	0.046
17AUG81	514	514	0.067	490		1.2	0.046	0.12	0.058	0.16	0.096	0.078
17SEP81	545	545	<0.038	400		0.27		0.053	<0.038	0.068	0.055	<0.038
19OCT81	577	577	<0.04	360	1.1	0.12		0.077	<0.04	<0.04	<0.04	<0.04

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= LEAD

SAMPLE DATE	DAYS A	DAYS - O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	0.039	0.063			V	V	0.047	0.03	0.076	0.041
22MAR80	1	1	0.034	0.027			0.056	V	0.033	0.035	0.042	V
23MAR80	2	2	0.018	0.076			0.052	V	0.021	0.013	0.03	0.019
24MAR80	3	3	V	0.071			0.037	V	0.04	0.034	0.012	0.023
26MAR80	5	5	0.031	0.1	0.081	V	0.042	0.019	0.021	0.058	0.033	0.037
28MAR80	7	7	V	V	0.047	V	0.043	0.023	0.02	0.069	0.029	0.04
31MAR80	10	10	.	.	.	.	.	.	.	.	.	.
04APR80	14	14	.	.	.	.	.	.	.	.	D	.
10APR80	20	20	.	.	.	.	.	.	.	.	.	.
19APR80	29	29	D	D	D	D	D	D	D	D	D	D
12MAY80	52	52	D	D	V	D	D	D	D	D	D	D
20MAY80	60	60	V	D	V	D	V	D	D	D	D	D
12JUN80	83	83	D	D	V	D	D	D	D	D	D	D
23JUL80	124	124	D	D	V	D	D	D	D	D	D	D
03SEP80	166	166	D	D	D	D	D	D	D	D	D	D
20OCT80	213	213	D	D	D	D	V	D	D	D	D	D
28NOV80	252	252	D	D	D	D	D	D	D	D	D	D
03FEB81	319	319	D	D		D		D	D	D	D	D
24APR81	399	399	D	D	D	D	D	D	D	D	D	D
18JUN81	454	454	D	D		D		D	D	D	D	D
17JUL81	488	488	D	D	D	D		D	D	D	D	D
17AUG81	514	514	D	D		D	D	D	D	D	D	D
17SEP81	545	545	D	D		D		D	D	D	D	D
19OCT81	577	577	D	D	D	D		D	D	D	D	D

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

D=DISCONTINUED AFTER DL REACHED

PARAMETER> LITHIUM

SAMPLE DATE	DAYS A	DAYS D	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	1.1	4.4			V	V	0.72	0.75	0.76	0.893
22MAR80	1	1	0.83	2.9			3.2	V	0.63	0.57	0.58	V
23MAR80	2	2	0.69	3			1.3	V	0.55	0.78	0.72	0.027
24MAR80	3	3	V	3.9			1.2	V	0.54	0.41	0.67	0.017
26MAR80	5	5	0.8	5	4	V	1.1	0.29	0.48	0.58	0.31	0.02
28MAR80	7	7	V	V	2.9	V	0.92	0.13	0.53	0.39	0.86	0.015
31MAR80	10	10	1.3	4.9	3.8	0.14	1	0.039	0.89	0.97	1.3	0.071
04APR80	14	14	1.3	2.5	2.9	0.11	0.86	0.022	0.81	0.76	1.2	0.017
10APR80	20	20	0.87	3.4	2.6	0.004	1.2	0.013	1.1	0.79	1.6	0.066
19APR80	29	29	3.1	5.5	1.9	0.003	1.9	0.006	2.8	1.4	<0.001	3.5
12MAY80	52	52	3.8	12	V	0.005	2.7	<0.001	3.9	1.9	<0.001	3.8
20MAY80	60	60	V	11	V	<0.001	V	<0.001	4.3	2.2	<0.001	4.1
12JUN80	83	83	3.7	5.8	V	<0.001	2.3	<0.001	3.9	2.4	3.4	0.078
23JUL80	124	124	2.9	5.3	V	<0.001	2.3	<0.001	3	2.7	3.4	0.073
03SEP80	168	166	2.4	5	3.2	<.0004	2.3	<.0004	2.5	1.5	1.4	0.17
20OCT80	218	213	2.3	5.8	4	0.007	V	0.002	2	2.1	1.3	<0.001
28NOV80	252	252	1.6	5.2	4.5	<0.001	3.4	<0.001	2	2.3	1.1	<0.001
03FEB81	319	319	1.4	4.4		<0.001		<0.001	1.7	2	0.84	<0.001
24APR81	399	399	1.6	2	2.6	<0.002	2.8	<0.002	1.1	2.1	0.67	0.026
18JUN81	454	454	1.2	1.4		<0.002		<0.002	1.1	2	0.64	0.033
17JUL81	488	483	1.2	1.6	2.4	<0.002		<0.002	1.1	2	0.52	0.014
17AUG81	514	514	0.95	1.8		<0.002	2.3	<0.002	1.2	2	0.65	<0.002
17SEP81	545	545	0.75	2		<0.002		<0.002	1	1.7	0.55	0.042
19OCT81	577	577	0.96	2.4	1.8	0.016		<0.002	0.95	1.6	0.64	<0.002

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= MAGNESIUM

SAMPLE DATE	DAYS A	DAYS D	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	0.48	870			V	V	0.83	54	1.5	220
22MAR80	1	1	1.9	620			2	V	0.25	66	0.32	V
23MAR80	2	2	0.98	710			0.61	V	0.3	90	0.51	260
24MAR80	3	3	V	890			<0.1	V	0.39	44	0.81	210
26MAR80	5	5	6.8	1100	3.4	V	0.32	22	0.21	71	0.49	140
28MAR80	7	7	V	V	2.7	V	1.6	9.8	0.28	100	3.5	260
31MAR80	10	10	0.53	800	0.8	20	1.1	8.3	0.3	100	280	0.54
04APR80	14	14	0.48	830	0.9	30	0.5	8.5	0.24	120	250	0.41
18APR80	28	28	0.39	790	0.85	39	0.4	7.2	0.21	110	240	0.4
19APR80	29	29	0.47	820	<0.003	0.52	<0.003	1	<0.003	0.47	0.23	<0.003
12MAY80	52	52	0.53	690	V	0.87	<0.003	1.1	<0.003	1	0.26	<0.003
20MAY80	60	60	V	730	V	1.1	V	1.6	0.018	1.2	0.35	0.025
12JUN80	83	83	1.3	210	V	47	1.3	47	1.6	130	4.2	210
23JUL80	124	124	1.1	300	V	56	2.5	36	1.7	140	4.3	200
03SEP80	168	168	0.66	510	0.7	54	3.8	41	0.53	100	0.51	210
20OCT80	213	213	0.62	620	0.17	45	V	38	0.048	100	0.24	240
28NOV80	252	252	0.45	470	0.35	43	5.3	39	<0.034	160	0.2	250
03FEB81	319	319	<0.068	830		110		87	<0.068	270	0.99	460
24APR81	399	399	0.19	220	<0.17	71	4.9	41	<0.17	150	<0.17	240
18JUN81	454	454	0.3	110		69		49	<0.17	130	0.26	240
17JUL81	483	483	1.1	130	1	56		51	0.42	120	<0.17	220
17AUG81	514	514	0.94	130		41	2.8	48	0.63	120	0.81	210
17SEP81	545	545	4.1	180		36		47	<0.17	120	0.32	200
19OCT81	577	577	3.2	120	0.69	48		59	<0.17	120	<0.17	250

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER: MANGANESE

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	0.005	21			V	V	0.014	0.18	0.022	0.21
22MAR80	1	1	0.027	15			0.029	V	<0.003	0.19	0.004	V
23MAR80	2	2	0.01	17			0.008	V	<0.003	0.31	0.006	0.53
24MAR80	3	3	V	22			<0.003	V	0.006	0.17	0.012	0.35
26MAR80	5	5	0.024	27	0.46	V	<0.003	4.2	<0.003	0.3	0.005	0.2
28MAR80	7	7	V	V	0.17	V	0.01	0.63	<0.003	0.45	0.014	0.33
31MAR80	10	10	0.042	21	0.43	0.21	0.01	0.42	0.014	0.55	0.021	0.4
04APR80	14	14	0.026	12	0.43	0.19	0.008	0.42	0.006	0.22	0.006	0.22
10APR80	20	20	0.026	15	0.28	0.22	0.007	0.56	0.013	0.31	0.019	0.26
19APR80	29	29	0.71	0.45	0.88	<0.006	0.92	0.012	0.98	1.2	0.019	1
12MAY80	52	52	0.69	1.5	V	<0.006	1.1	<0.006	1.1	1.5	0.01	0.84
20MAY80	60	60	V	1.4	V	<0.006	V	0.01	1.2	1.6	0.008	0.82
12JUN80	83	83	<0.003	19	V	1.3	0.014	2.2	0.025	0.56	0.055	1.1
23JUL80	124	124	<0.003	19	V	1.8	0.007	1.5	0.25	0.3	0.055	1.1
03SEP80	166	166	0.14	14	0.02	0.98	0.008	1.5	0.22	0.44	0.25	0.53
20OCT80	213	213	0.057	16	0.029	1.5	V	1.4	0.15	0.3	0.38	0.12
28NOV80	252	252	0.13	12	0.006	1.5	0.003	1.3	0.19	0.23	0.34	0.075
03FEB81	319	319	0.026	9		0.9		1	0.006	0.18	0.19	0.012
24APR81	399	399	<0.006	4.9	<0.006	0.62	<0.006	0.62	0.29	0.088	0.17	<0.006
18JUN81	454	454	0.01	2.3		0.57		0.67	0.43	0.064	0.1	<0.006
17JUL81	483	483	0.14	2.6	<0.006	0.51		0.78	0.46	0.013	0.022	<0.006
17AUG81	514	514	0.48	3		0.41	<0.006	0.8	0.54	<0.006	0.02	<0.006
17SEP81	545	545	0.12	2.3		0.51		0.93	0.41	<0.006	0.086	<0.006
19OCT81	577	577	0.12	1.9	0.057	0.92		1.5	0.43	0.013	0.073	0.008

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER> MOLYBDENUM

SAMPLE DATE	DAYS A	DAYS D	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	0.32	0.53			V	V	0.42	0.9	0.51	0.11
22MAR80	1	1	0.42	0.41			0.8	V	0.44	0.73	0.28	V
23MAR80	2	2	0.28	0.39			0.44	V	0.37	0.98	0.45	<0.028
24MAR80	3	3	V	0.5			0.59	V	0.45	0.46	0.47	0.04
26MAR80	5	5	0.27	0.59	0.94	V	0.62	<0.028	0.34	0.6	0.13	<0.028
28MAR80	7	7	V	V	0.83	V	0.7	0.21	0.47	0.94	0.46	<0.028
31MAR80	10	10	0.43	0.44	0.83	0.008	0.54	0.017	0.53	0.93	0.54	0.084
04APR80	14	14	0.52	0.32	0.84	0.11	0.57	0.029	0.5	0.91	0.53	0.05
10APR80	20	20	0.3	0.33	0.59	0.019	0.6	0.046	0.59	0.99	0.63	0.13
19APR80	29	29	<0.009	29	<0.009	0.021	<0.009	0.054	<0.009	0.15	0.014	<0.009
12MAY80	52	52	0.021	71	V	0.054	<0.009	0.042	0.018	0.12	<0.009	0.03
20MAY80	60	60	V	64	V	0.04	V	0.11	0.014	0.12	<0.009	<0.009
12JUN80	83	83	0.78	0.49	V	<0.006	0.84	<0.006	1.3	0.69	0.98	0.028
23JUL80	124	124	0.85	0.22	V	<0.002	0.91	<0.002	1.2	0.79	1.1	0.037
03SEP80	166	166	0.82	0.29	1.2	<0.009	1	<0.009	1	0.67	0.78	0.13
20OCT80	213	213	0.78	0.35	1.4	<0.002	V	<0.002	0.93	1	0.64	<0.002
28NOV80	252	252	0.94	0.26	1.4	<0.002	1.4	<0.002	1	1.3	0.79	<0.002
03FEB81	319	319	0.85	0.33		<0.004		<0.004	1	1.2	0.73	0.026
24APR81	399	399	0.84	0.13	1.2	<0.01	1.3	0.015	0.86	1.2	0.85	<0.01
18JUN81	454	454	0.49	<0.01		<0.01		<0.01	0.64	0.86	0.65	<0.01
17JUL81	483	483	0.61	<0.01	1.1	<0.01		<0.01	0.85	0.98	0.89	<0.01
17AUG81	514	514	0.63	0.034		<0.01	1.3	<0.01	0.92	1.2	0.94	<0.01
17SEP81	545	545	0.49	0.068		<0.01		<0.01	0.8	1	0.86	0.037
19OCT81	577	577	0.64	0.02	1.3	0.022		<0.01	0.83	1.1	0.95	<0.01

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= NICKEL

SAMPLE DATE	DAYS A - O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0 0	<0.051	30			V	V	0.13	0.19	0.17	0.2
22MAR80	1 1	0.2	23			0.21	V	<0.051	0.052	<0.051	V
23MAR80	2 2	<0.051	26			<0.051	V	<0.051	0.078	<0.051	<0.051
24MAR80	3 3	V	34			<0.051	V	<0.051	0.1	0.067	<0.051
26MAR80	5 5	<0.051	41	<0.051	V	<0.051	<0.051	<0.051	0.054	<0.051	<0.051
28MAR80	7 7	V	V	0.21	V	0.25	0.32	<0.051	0.063	<0.051	<0.051
31MAR80	10 10	0.025	26	0.039	0.025	0.022	0.12	0.054	0.2	0.16	0.16
04APR80	14 14	0.16	16	0.16	0.22	<0.009	0.032	0.012	0.085	<0.009	<0.009
10APR80	20 20	0.1	18	<0.009	<0.009	<0.009	0.073	<0.009	0.17	0.088	0.1
19APR80	29 29	<0.017	30	<0.009	0.021	<0.009	0.054	<0.009	0.15	<0.009	0.014
12MAY80	52 52	0.021	72	V	0.054	<0.009	0.042	0.018	0.12	0.03	<0.009
20MAY80	60 60	V	64	V	0.04	V	0.11	0.014	0.12	<0.009	<0.009
12JUN80	83 83	<0.009	24	V	0.11	0.064	0.085	0.017	0.2	0.015	0.12
23JUL80	124 124	0.014	11	V	0.072	<0.003	0.04	0.006	0.075	0.013	0.05
03SEP80	166 166	0.03	16	0.2	0.08	<0.017	0.06	0.05	0.12	0.04	0.16
20OCT80	218 213	<0.003	18	<0.003	0.044	V	0.047	<0.003	<0.003	<0.003	<0.003
28NOV80	252 252	<0.003	13	<0.003	0.022	<0.003	0.033	<0.003	<0.003	<0.003	<0.003
03FEB81	319 319	<0.006	10		0.045		0.031	<0.006	0.027	<0.006	0.048
24APR81	399 399	<0.015	5.4	0.018	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
18JUN81	454 454	0.069	2.7		0.14		0.12	0.084	0.13	0.071	0.11
17JUL81	488 483	<0.015	2.9	0.027	<0.015		0.018	0.02	0.022	<0.015	<0.015
17AUG81	514 514	0.041	3.2		0.038	<0.015	0.066	0.034	0.1	0.074	0.056
17SEP81	545 545	<0.015	2.1		0.023		0.059	0.019	0.037	0.037	0.053
19OCT81	577 577	<0.015	0.32	<0.015	<0.015		<0.015	<0.015	<0.015	<0.015	<0.015

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER: PH

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	12	2.2			V	V	12	7.3	12	7.2
22MAR80	1	1	12	2.1			12	V	12	7.6	12	V
23MAR80	2	2	12	E			11	V	12	7.9	12	7.4
24MAR80	3	3	V	2			11	V	12	8	12	7.7
26MAR80	5	5	6.9	1.9	7.5	V	12	7.6	12	7.9	11	7.4
28MAR80	7	7	V	V	7.5	V	12	7	12	7.7	7.4	7.4
31MAR80	10	10	7.1	2.1	7	6.5	12	6.1	13	7.6	12	7.3
04APR80	14	14	11	2.2	7.7	6	12	5.8	12	7.5	12	7.2
10APR80	20	20	9.1	2.3	7.6	5.1	12	6.3	13	8	12	7.5
19APR80	29	29	11	2.1	12	6.3	12	6.8	12	7.6	11	7.2
12MAY80	52	52	7.8	2	V	6.5	11	6.7	7.9	7.7	8.3	7.1
20MAY80	60	60	V	.	V	6.5	V	6.6	7.7	7.9	8	7.4
12JUN80	83	83	8.8	2.1	V	5.6	7.5	6.5	7.9	7.8	7.8	7
23JUL80	124	124	7.8	2.1	V	5.7	7.6	6.3	8	7.9	7.8	7.5
03SEP80	168	166	7.6	2	12	5.1	7.4	6.5	7.9	7.5	7.6	7.4
20OCT80	213	213	8.1	2	8	4.3	V	6.3	7.9	7.6	7.8	7.7
28NOV80	252	252	7.8	2.1	8	5.5	7.7	5.9	7.7	7.5	7.6	7.4
03DEC81	319	319	7.7	2.1		5.1		5.7	7.5	7.2	7.2	7.4
24APR81	399	399	7.1	2	8.1	5.2	7.7	5.9	7.2	7.1	7.3	7.2
18JUN81	454	454	7.2	2.2		5.7		6.1	7.1	7.3	7.7	7.5
17JUL81	483	483	7.3	2.1	8.1	5.9		6.2	7.3	7.5	7.5	7.6
17AUG81	514	514	8	2.2		5.8	8	6.4	7.7	7.4	8.2	7.7
17SEP81	545	545	7.6	2.2		5.7		6.7	7.2	7.5	7.2	7.1
19OCT81	577	577	7.7	2.4	7.6	6.5		6.5	8	7.8	7.8	7.7

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= POTASSIUM

SAMPLE DATE	DAYS A	DAYS D	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	200	110			V	V	110	210	170	40
22MAR80	1	1	130	80			0.1	V	130	150	160	V
23MAR80	2	2	120	81			370	V	120	180	210	37
24MAR80	3	3	V	100			340	V	120	85	190	34
26MAR80	5	5	140	120	0.14	V	300	11	120	130	79	22
28MAR80	7	7	V	V	980	V	210	6.9	130	160	180	39
31MAR80	10	10	230	120	0.11	8.8	230	5.9	170	270	270	40
04APR80	14	14	230	65	830	6.5	200	6.4	160	140	260	39
10APR80	20	20	140	80	670	3.4	270	9	210	150	330	38
19APR80	29	29	600	160	770	6.7	440	19	490	230	72	710
12MAY80	52	52	920	360	V	8.9	540	15	760	240	79	780
20MAY80	60	60	V	320	V	9.1	V	17	860	250	96	850
12JUN80	83	83	850	210	V	12	380	12	1100	160	1100	60
23JUL80	124	124	850	210	V	15	390	10	1000	450	1400	45
03SEP80	166	166	600	120	810	12	710	8.9	640	190	300	41
20OCT80	213	213	21	100	57	9.8	V	8	260	210	240	38
28NOV80	252	252	250	75	42	9.1	180	8.1	250	210	210	38
03FEB81	319	319	830	90		10		8.4	530	290	340	60
24APR81	399	399	180	24	320	4.4	330	3.5	150	170	92	25
18JUN81	454	454	220	95		11		9.1	250	350	130	76
17JUL81	483	483	220	64	590	10		11	240	370	100	85
17AUG81	514	514	160	120		5.4	1100	9	240	400	100	94
17SEP81	545	545	200	82		7		8.8	230	410	100	110
19OCT81	577	577	290	120	310	9.3		9.8	270	600	140	110

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= SELENIUM

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	<0.002	0.012			V	V	<0.002	<0.002	<0.002	<0.002
22MAR80	1	1	<0.002	0.006			<0.002	V	<0.002	<0.002	<0.002	V
23MAR80	2	2	<0.002	0.011			<0.002	V	<0.002	<0.002	<0.002	<0.002
24MAR80	3	3	V	0.011			<0.002	V	<0.002	<0.002	<0.002	<0.002
26MAR80	5	5	<0.002	0.012	<0.002	V	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
28MAR80	7	7	V	V	<0.002	V	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
31MAR80	10	10	<0.004	<0.004	D	D	D	D	D	D	D	D
04APR80	14	14	<0.004	<0.004	D	D	D	D	D	D	D	D
10APR80	20	20	<0.004	<0.004	D	D	D	D	D	D	D	D
19APR80	29	29	D	D	D	D	D	D	D	D	D	D
12MAY80	52	52	D	D	D	D	D	D	D	D	D	D
20MAY80	60	60	D	D	D	D	D	D	D	D	D	D
12JUN80	83	83	D	D	D	D	D	D	D	D	D	D
23JUL80	124	124	D	D	D	D	D	D	D	D	D	D
03SEP80	166	166	D	D	D	D	D	D	D	D	D	D
20OCT80	213	213	D	D	D	D	D	D	D	D	D	D
28NOV80	252	252	D	D	D	D	D	D	D	D	D	D
03FEB81	319	319	D	D		D	D	D	D	D	D	D
24APR81	399	399	D	D	D	D	D	D	D	D	D	D
18JUN81	454	454	D	D		D	D	D	D	D	D	D
17JUL81	488	488	D	D	D	D		D	D	D	D	D
17AUG81	514	514	D	D		D	D	D	D	D	D	D
17SEP81	545	545	D	D		D		D	D	D	D	D
19OCT81	577	577	D	D	D	D		D	D	D	D	D

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

D=DISCONTINUED AFTER DL REACHED

PARAMETER= SILICON

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	0.88	23			V	V	0.81	9.4	1.6	4.3
22MAR80	1	1	3.1	30			3.2	V	1.1	11	1.6	V
23MAR80	2	2	2.9	34			0.89	V	1.1	12	1.8	9.4
24MAR80	3	3	V	49			0.88	V	1	5.4	2.6	7.5
26MAR80	5	5	34	65	16	V	0.38	21	0.98	8.3	1.6	5
28MAR80	7	7	V	V	11	V	0.49	7.8	1.3	12	20	9.8
31MAR80	10	10	36	77	17	11	0.54	9.3	1.6	14	2.2	9.7
04APR80	14	14	22	45	24	7.6	0.79	6.6	0.61	7.5	1.1	8.4
10APR80	20	20	19	57	19	7.3	0.88	7.4	0.88	8.7	1.4	8.6
19APR80	29	29	29	67	4	12	1	12	2.1	12	11	15
12MAY80	52	52	52	110	V	13	16	11	68	26	16	80
20MAY80	60	60	V	100	V	16	V	15	65	31	24	71
12JUN80	83	83	30	67	V	9.6	28	13	44	14	48	11
23JUL80	124	124	31	100	V	9.7	58	11	36	16	41	11
03SEP80	166	166	30	120	2.5	9.5	59	10	25	16	17	9.2
20OCT80	213	213	42	160	50	12	V	9.4	19	20	22	17
28NOV80	252	252	14	150	78	12	71	9.3	20	27	12	15
03FEB81	319	319	15	88		8.9		8.3	23	22	13	13
24APR81	399	399	29	78	89	8.2	48	7	20	21	8.3	5.9
18JUN81	454	454	21	78		9.4		8	25	20	11	6.1
17JUL81	488	483	20	69	55	7.8		7.4	23	20	9.8	6.7
17AUG81	514	514	28	85		9.1	55	9.1	24	25	6.8	7.6
17SEP81	545	545	20	84		10		10	24	25	8.8	9.2
19OCT81	577	577	38	100	42	11		12	14	17	9.4	7.5

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= SILVER

SAMPLE DATE	DAYS A - O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0 0	0.033	0.13			V	V	0.12	0.16	0.19	0.22
22MAR80	1 1	0.24	0.25			0.24	V	<0.007	0.024	0.019	V
23MAR80	2 2	0.069	0.093			0.064	V	0.011	0.049	0.033	0.055
24MAR80	3 3	V	0.028			<0.007	V	0.05	0.11	0.098	0.042
26MAR80	5 5	0.042	0.045	0.031	V	<0.007	<0.007	<0.007	0.012	0.039	0.047
28MAR80	7 7	V	V	0.16	V	0.26	0.33	<0.007	0.024	0.083	0.038
31MAR80	10 10	<0.006	0.053	0.021	0.007	0.046	0.058	0.084	0.13	0.15	0.17
04APR80	14 14	0.21	0.22	0.21	0.25	0.027	0.042	0.028	0.076	0.024	0.043
10APR80	20 20	0.2	0.021	<0.006	<0.006	0.013	0.042	0.066	0.16	0.13	0.19
19APR80	29 29	<0.006	0.044	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
12MAY80	52 52	<0.006	0.22	V	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
20MAY80	60 60	V	0.2	V	<0.006	V	<0.006	<0.006	<0.006	<0.006	<0.006
12JUN80	83 83	0.014	0.022	V	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
23JUL80	124 124	<0.002	0.024	V	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
03SEP80	166 166	<0.002	0.034	0.08	<0.002	0.04	<0.002	0.05	0.13	0.07	0.28
20OCT80	213 213	<0.002	0.019	<0.002	<0.002	V	<0.002	<0.002	<0.002	<0.002	<0.002
28NOV80	252 252	<0.002	0.012	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
03FEB81	319 319	<0.002	0.005		<0.002		<0.002	<0.002	<0.002	<0.002	<0.002
24APR81	399 399	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
18JUN81	454 454	<0.005	<0.005		<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
17JUL81	483 483	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.009	<0.01
17AUG81	514 514	<0.009	<0.009		<0.009	<0.009	<0.009	<0.01	0.015	<0.01	<0.009
17SEP81	545 545	<0.01	<0.01		<0.01		<0.01	<0.01	<0.01	0.011	<0.01
19OCT81	577 577	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= SODIUM

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	63	<0.017			V	V	42	220	58	20
22MAR80	1	1	46	<0.017			330	V	49	190	55	V
23MAR80	2	2	44	<0.017			120	V	46	290	67	25
24MAR80	3	3	V	<0.017			100	V	45	120	60	18
26MAR80	5	5	52	<0.017	480	V	95	70	46	200	27	11
28MAR80	7	7	V	V	300	V	67	11	48	300	60	21
31MAR80	10	10	74	<0.017	350	26	77	16	61	390	83	22
04APR80	14	14	69	52	240	8.2	66	14	61	170	84	24
10APR80	20	20	43	<0.017	190	8.2	89	19	72	240	100	21
19APR80	29	29	160	<0.017	210	15	130	42	160	360	34	210
12MAY80	52	52	230	<0.017	V	20	180	55	240	930	36	220
20MAY80	60	60	V	<0.017	V	20	V	60	270	0.12	44	250
12JUN80	83	83	200	86	V	25	150	37	280	290	270	33
23JUL80	124	124	190	97	V	44	230	34	260	420	360	64
03SEP80	166	166	160	38	240	62	270	39	190	290	75	110
200CT80	213	213	220	50	260	73	V	38	140	330	96	140
28NOV80	252	252	130	55	270	77	330	40	130	320	80	160
03FEB81	319	319	150	60		78		32	100	240	56	130
24APR81	399	399	82	32	230	120	360	40	65	240	34	120
18JUN81	454	454	44	27		140		51	51	180	23	120
17JUL81	483	483	48	38	130	140		67	51	160	18	100
17AUG81	514	514	30	18		110	290	72	47	130	17	82
17SEP81	545	545	38	25		110		80	48	120	19	81
190CT81	577	577	45	29	58	130		110	49	110	25	84

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= STRONTIUM

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	25	31			V	V	70	52	30	1.9
22MAR80	1	1	27	31			30	V	60	36	28	V
23MAR80	2	2	44	28			30	V	65	43	25	2.1
24MAR80	3	3	V	36			30	V	30	19	27	1.6
26MAR80	5	5	34	42	49	V	32	1.8	40	28	26	1
28MAR80	7	7	V	V	45	V	35	0.32	40	36	51	1.9
31MAR80	10	10	23	25	47	2.7	53	0.52	52	32	49	1.5
04APR80	14	14	16	29	35	0.21	40	0.73	37	29	34	1.6
10APR80	20	20	8.2	29	28	0.3	37	1	37	26	27	1.3
19APR80	29	29	31	30	45	0.63	38	2.1	25	40	2.3	33
12MAY80	52	52	19	.	V	0.91	24	1.6	11	37	2.5	18
20MAY80	60	60	V	20	V	0.94	V	1.7	14	36	3	24
12JUN80	83	83	19	21	V	1.1	14	0.92	8.9	20	9.1	1.8
23JUL80	124	124	9.7	11	V	1.6	11	0.78	10	15	9.6	1.6
03SEP80	168	166	13	6.3	58	1.4	7.3	0.85	14	10	29	1
20OCT80	213	213	8.5	5.7	21	0.89	V	0.74	20	12	29	1.8
28NOV80	252	252	12	4.3	15	0.82	6.7	0.79	24	13	29	1.7
03FEB81	319	319	8.4	4.7		0.79		0.89	26	11	28	21
24APR81	399	399	39	3.5	4.5	0.92	4.2	0.98	36	11	37	2.1
18JUN81	454	454	41	5.6		0.77		0.95	40	9.2	37	2.5
17JUL81	488	483	29	4.9	37	0.52		0.82	38	8.5	31	2.5
17AUG81	514	514	26	7.1		0.41	3.4	0.78	36	9.5	26	2.8
17SEP81	545	545	19	7.1		0.35		0.63	34	9.5	26	3.2
19OCT81	577	577	27	8.9	51	0.58		0.8	31	9.7	31	3.4

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= SULPHATES

SAMPLE DATE	DAYS A - O		CELL 13 (INTERBURDEN)		CELL 14 (ALLUVIUM)		CELL 15 (ALLUVIUM)		CELL 16 (LIMESTONE)		CELL 17 (SHALE)	
			U	L	U	L	U	L	U	L	U	L
21MAR80	0	0	1600	19000			V	V	1900	1600	1700	1500
22MAR80	1	1	1500	12000			1900	V	1600	1700	1400	V
23MAR80	2	2	1400	E			1600	V	1400	1700	1400	1600
24MAR80	3	3	V	18000			1600	V	1300	1700	1300	1600
26MAR80	5	5	1700	22000	1800	V	1600	250	1200	1800	1200	1600
28MAR80	7	7	V	V	1600	V	1600	63	1100	1800	1200	1600
31MAR80	10	10	1400	19000	1600	130	1400	38	1200	1900	1300	1500
04APR80	14	14	1100	16000	1300	51	1300	36	1200	1500	1300	1600
10APR80	20	20	1200	11000	1000	62	1100	46	1100	1500	1100	1500
19APR80	29	29	960	13000	860	37	1000	47	1100	1800	940	1600
12MAY80	52	52	1200	40000	V	30	980	47	1900	2600	1600	1800
20MAY80	60	60	V	.	V	32	V	58	2100	2800	1700	1800
12JUN80	83	83	1500	23000	V	62	990	170	1800	2200	1700	1800
23JUL80	124	124	1200	11000	V	56	1400	100	1500	2300	1800	1700
03SEP80	166	166	1200	13000	1e00	130	1900	130	1500	2200	1200	2500
20OCT80	213	213	840	15000	1900	260	V	110	1300	2600	1000	2000
28NOV80	252	252	810	11000	1600	240	2200	81	1100	2400	970	2300
03FEB81	319	319	950	12000		400		71	1100	2100	870	2300
24APR81	399	399	570	6400	1200	760	2200	90	390	1700	860	1800
18JUN81	454	454	5300	5300		820		260	880	1500	870	1900
17JUL81	483	483	1100	4200	810	800		330	1100	1400	1100	2100
17AUG81	514	514	1000	4600		610	1600	430	1200	1300	1100	2200
17SEP81	545	545	920	3800		530		430	1100	1300	970	2100
19OCT81	577	577	920	4000	860	510		450	1100	1400	1000	2200

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER: TITANIUM

SAMPLE DATE	DAYS A - D	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0 0	0.069	0.19			V	V	0.22	0.29	0.35	0.4
22MAR80	1 1	0.44	0.43			0.45	V	<0.024	0.035	0.029	V
23MAR80	2 2	0.12	0.13			0.11	V	<0.024	0.089	0.062	0.098
24MAR80	3 3	V	<0.024			<0.024	V	0.098	0.21	0.18	0.071
26MAR80	5 5	0.079	0.05	0.059	V	<0.024	<0.024	<0.024	<0.024	0.067	0.077
28MAR80	7 7	V	V	0.24	V	0.42	0.56	<0.024	0.05	0.16	0.074
31MAR80	10 10	0.017	0.082	0.048	0.02	0.089	0.11	0.15	0.24	0.28	0.29
04APR80	14 14	0.38	0.38	0.37	0.45	0.054	0.074	0.049	0.13	0.042	0.069
10APR80	20 20	0.37	0.052	<0.015	<0.015	0.053	0.1	0.15	0.3	0.26	0.35
19APR80	29 29	<0.015	0.054	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
12MAY80	52 52	<0.015	0.26	V	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
20MAY80	60 60	V	0.24	V	<0.015	V	<0.015	<0.015	<0.015	<0.015	<0.015
12JUN80	83 83	0.019	<0.015	V	<0.015	<0.015	<0.015	<0.015	0.1	<0.015	<0.015
23JUL80	124 124	<0.005	0.036	V	<0.005	<0.005	<0.005	<0.005	0.12	<0.005	<0.005
03SEP80	166 166	<0.008	0.037	0.15	<0.008	0.06	<0.008	0.04	0.22	0.11	0.45
20OCT80	213 213	<0.005	0.014	<0.005	<0.005	V	0.012	<0.005	<0.005	<0.005	<0.005
28NOV80	252 252	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
03FEB81	319 319	<0.01	0.014		<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
24APR81	399 399	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
18JUN81	454 454	<0.025	<0.025		<0.025		<0.025	<0.025	<0.025	<0.025	<0.025
17JUL81	488 483	<0.025	<0.025	<0.025	<0.025		<0.025	<0.025	<0.025	<0.025	<0.025
17AUG81	514 514	<0.025	<0.025		<0.025	<0.025	<0.025	0.14	0.04	0.16	<0.025
17SEP81	545 545	<0.025	<0.025		<0.025		<0.025	<0.025	<0.025	<0.025	<0.025
19OCT81	577 577	<0.025	<0.015	<0.025	<0.025		<0.025	<0.025	<0.025	<0.025	<0.025

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER: TOTAL DISSOLVED SOLIDS

SAMPLE DATE	DAYS A	DAYS D	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	6800	30000			V	V	5800	5200	6400	4600
22MAR80	1	1	4700	19000			8500	V	4700	4600	6000	V
23MAR80	2	2	4600	E			7500	V	4700	4900	6300	4500
24MAR80	3	3	V	27000			5100	V	3500	4900	5500	4400
26MAR80	5	5	4200	32000	11000	V	5900	790	4100	5000	4900	4100
28MAR80	7	7	V	V	6900	V	5400	110	3200	4700	5700	3900
31MAR80	10	10	3300	26000	7800	540	5000	530	4300	5100	5100	4000
04APR80	14	14	3100	14000	6500	110	4500	1100	4200	4100	4700	4100
10APR80	20	20	3000	17000	5200	150	4300	1500	4300	4200	4900	4400
19APR80	29	29	2800	21000	4100	560	3900	1600	4500	4200	3300	4400
12MAY80	52	52	3100	68000	V	960	2300	1400	3800	5300	3600	4400
20MAY80	60	60	V	•	V	830	V	1600	4100	5900	4000	4800
12JUN80	83	83	3000	27000	V	1700	2500	1400	3800	4200	4200	4300
23JUL80	124	124	2800	16000	V	2000	3400	1200	3600	5400	5100	4800
03SEP80	166	166	3600	21000	4100	2300	4200	1300	3300	4300	2400	•
20OCT80	213	213	3100	21000	3700	1400	V	1200	2800	4300	2500	3900
28NOV80	252	252	2500	17000	4400	2000	5400	1600	3200	5000	8100	4600
03FEB81	319	319	2500	16000		1500		1100	2300	3800	2100	3800
24APR81	399	399	2000	9500	3800	2000	4900	1700	2000	3400	2100	3700
18JUN81	454	454	2000	6900		1800		1600	2300	2900	2100	3900
17JUL81	483	483	2000	6108	2200	1600		1300	2400	2600	1900	3400
17AUG81	514	514	2100	6900		1300	3900	1300	2800	2700	2100	3800
17SEP81	545	545	3700	6400		1600		1600	2900	3400	2500	4200
19OCT81	577	577	2000	5400	2000	1100		1400	2300	2600	2000	3600

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER: TOTAL INORGANIC CARBON

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	.	.			V	V	.	.	.	.
22MAR80	1	1	.	.			.	V	.	.	.	V
23MAR80	2	2	.	E			.	V	.	.	.	.
24MAR80	3	3	V	.			.	V	.	.	.	.
26MAR80	5	5	.	.	.	V	.	.	.	.	.	.
28MAR80	7	7	V	V	.	V	.	.	.	.	.	.
31MAR80	10	10	.	.	.	.	.	.	.	.	.	.
04APR80	14	14	.	.	.	.	.	.	.	.	.	.
10APR80	20	20	.	.	.	.	.	.	.	.	.	.
19APR80	29	29	.	.	.	.	.	.	.	.	.	.
12MAY80	52	52	.	.	V	.	.	.	.	.	.	.
20MAY80	60	60	V	.	V	.	V	.	.	.	.	.
12JUN80	83	83	.	.	V	.	.	.	.	.	.	.
23JUL80	124	124	.	.	V	.	.	.	.	.	.	.
03SEP80	166	166	.	.	.	.	.	.	.	.	.	.
20OCT80	213	213	.	.	.	.	V	.	.	.	.	.
28NOV80	252	252	.	.	.	.	.	.	.	.	.	.
03FEB81	319	319	.	.	.	.	.	.	.	.	.	.
24APR81	399	399	.	.	.	.	.	.	.	.	.	.
18JUN81	454	454	9.8	<2	.	<2	.	<2	36	48	34	49
17JUL81	488	483	.	.	.	.	.	.	.	.	.	.
17AUG81	514	514	.	.	.	.	.	.	.	.	.	.
17SEP81	545	545	49	<2	.	<2	.	<2	43	61	44	71
19OCT81	577	577	.	.	.	.	.	.	.	.	.	.

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= TOTAL ORGANIC CARBON

SAMPLE DATE	DAYS A	DAYS - 0	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	12	2.7			V	V	5.4	11	11	1.9
22MAR80	1	1	12	0.72			18	V	11	5.2	13	V
23MAR80	2	2	.	E			.	V	12	5.4	14	4.7
24MAR80	3	3	V	.			5	V	13	6.6	14	4.7
26MAR80	5	5	.	.	16	V	6.6	.	17	7.7	20	4.4
28MAR80	7	7	V	V	16	V	8.4	8.6	20	13	.	3.5
31MAR80	10	10	15	2.4	12	14	8.7	2.7	10	7.2	12	5.2
04APR80	14	14	7.9	3	8.5	2.2	.	.	.	.	.	.
10APR80	20	20	.	.	.	.	.	.	.	.	.	.
19APR80	29	29	.	.	.	.	.	.	.	.	.	.
12MAY80	52	52	.	.	V	.	.	.	.	.	.	.
20MAY80	60	60	V	31	V	10	V	9.5	18	13	20	10
12JUN80	83	83	.	.	V	.	.	.	.	.	.	.
23JUL80	124	124	.	.	V	.	.	.	.	.	.	.
03SEP80	166	166	.	.	.	.	.	.	.	.	.	.
20OCT80	213	213	.	.	.	.	V	.	.	.	.	.
28NOV80	252	252	9.8	.	.	10	.	5.7	16	41	10	18
03FEB81	319	319	.	.	.	.	.	.	.	.	.	.
24APR81	399	399	.	.	.	.	.	.	.	.	.	.
18JUN81	454	454	.	.	.	.	.	.	.	.	.	.
17JUL81	488	483	.	.	.	.	.	.	.	.	.	.
17AUG81	514	514	.	.	.	.	.	.	.	.	.	.
17SEP81	545	545	.	.	.	.	.	.	.	.	.	.
19OCT81	577	577	.	.	.	.	.	.	.	.	.	.

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER: VANADIUM

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	0.077	0.58			V	V	0.21	0.26	0.31	0.36
22MAR80	1	1	0.37	0.74			0.36	V	<0.057	<0.057	<0.057	V
23MAR80	2	2	0.083	0.56			0.094	V	<0.057	0.11	0.078	0.13
24MAR80	3	3	V	0.7			0.06	V	0.11	0.11	0.17	0.11
26MAR80	5	5	0.12	0.81	0.091	V	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057
28MAR80	7	7	V	V	0.29	V	0.42	0.47	<0.057	0.073	0.16	0.13
31MAR80	10	10	0.058	0.54	0.079	0.826	0.1	0.091	0.15	0.21	0.23	0.27
04APR80	14	14	0.29	0.54	0.29	0.31	0.066	0.056	0.071	0.12	0.077	0.12
10APR80	20	20	0.18	0.38	<0.009	<0.009	0.023	0.034	0.08	0.17	0.16	0.24
19APR80	29	29	0.027	0.75	<0.009	<0.009	<0.009	0.015	<0.009	<0.009	0.04	<0.009
12MAY80	52	52	<0.009	1.7	V	<0.009	<0.009	<0.009	<0.009	0.054	0.048	<0.009
20MAY80	60	60	V	1.7	V	<0.009	V	<0.009	0.015	0.024	0.033	<0.009
12JUN80	83	83	0.032	0.73	V	<0.009	<0.009	<0.009	<0.009	0.06	0.06	0.04
23JUL80	124	124	0.05	0.49	V	0.009	0.031	0.029	<0.003	0.039	<0.003	0.09
03SEP80	166	166	<0.019	1	0.37	0.03	0.08	<0.019	0.09	0.2	0.06	0.42
20OCT80	213	213	<0.003	0.61	0.012	0.011	V	<0.003	<0.003	<0.003	<0.003	<0.003
28NOV80	252	252	<0.003	0.41	0.011	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
03FEB81	319	319	<0.006	0.34		0.053		0.03	<0.006	<0.006	<0.006	0.055
24APR81	399	399	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
18JUN81	454	454	<0.015	<0.015		<0.015		<0.015	<0.015	<0.015	<0.015	<0.015
17JUL81	488	483	0.11	0.27	0.07	<0.015		0.092	0.16	<0.015	<0.015	<0.015
17AUG81	514	514	0.13	<0.015		<0.015	0.067	<0.015	0.16	0.16	0.23	<0.015
17SEP81	545	545	<0.015	0.084		<0.015		<0.015	<0.015	<0.015	0.064	0.084
19OCT81	577	577	<0.015	<0.015	<0.015	0.03		<0.015	<0.015	<0.015	<0.015	<0.015

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

PARAMETER= ZINC

SAMPLE DATE	DAYS A	DAYS O	CELL 13 (INTERBURDEN) U	CELL 13 (INTERBURDEN) L	CELL 14 (ALLUVIUM) U	CELL 14 (ALLUVIUM) L	CELL 15 (ALLUVIUM) U	CELL 15 (ALLUVIUM) L	CELL 16 (LIMESTONE) U	CELL 16 (LIMESTONE) L	CELL 17 (SHALE) U	CELL 17 (SHALE) L
21MAR80	0	0	<0.039	55			V	V	<0.039	0.079	0.066	0.16
22MAR80	1	1	0.064	41			0.081	V	<0.039	0.062	<0.039	V
23MAR80	2	2	<0.039	52			<0.039	V	<0.039	0.088	<0.039	0.35
24MAR80	3	3	V	66			<0.039	V	<0.039	0.055	<0.039	0.096
26MAR80	5	5	<0.039	81	<0.039	V	<0.039	0.15	<0.039	0.058	<0.039	0.057
28MAR80	7	7	V	V	0.077	V	0.084	0.19	<0.039	0.085	<0.039	0.12
31MAR80	10	10	0.01	50	0.062	0.094	0.021	0.075	0.028	0.13	0.044	0.15
04APR80	14	14	0.053	32	0.079	8.1	0.012	0.06	<0.009	0.15	<0.009	0.12
10APR80	20	20	0.052	34	0.03	0.063	<0.009	0.055	<0.009	0.1	0.019	0.12
19APR80	29	29	<0.009	51	<0.009	0.063	<0.009	0.096	<0.009	0.099	0.12	<0.009
12MAY80	52	52	<0.009	130	V	0.083	<0.009	0.079	<0.009	0.1	0.16	<0.009
20MAY80	60	60	V	110	V	0.093	V	0.12	<0.009	0.11	0.13	<0.009
12JUN80	83	83	<0.009	43	V	0.1	<0.009	0.12	<0.009	0.13	<0.009	0.1
23JUL80	124	124	0.021	2.9	V	0.11	0.017	0.11	<0.003	0.086	<0.003	0.1
03SEP80	166	166	<0.013	36	<0.13	0.11	0.02	0.09	0.02	0.17	0.02	0.16
20OCT80	213	213	0.012	35	0.006	0.18	V	0.084	<0.003	0.041	<0.003	0.069
28NOV80	252	252	0.032	24	<0.003	0.19	<0.003	0.068	<0.003	0.063	<0.003	0.077
03FEB81	319	319	<0.006	18		0.066		0.048	<0.006	0.009	0.019	<0.006
24APR81	399	399	<0.015	11	<0.015	0.11	<0.015	0.12	0.03	0.18	0.032	0.08
18JUN81	454	454	0.036	5.5		0.15		0.098	0.042	0.11	0.053	0.12
17JUL81	483	483	0.015	5.8	<0.815	0.12		0.1	0.032	0.072	<0.015	0.059
17AUG81	514	514	0.02	6.2		0.1	<0.015	0.096	0.036	0.068	0.025	0.07
17SEP81	545	545	0.095	4.9		0.1		0.091	0.044	0.11	0.043	0.068
19OCT81	577	577	0.019	5.2	0.028	0.069		0.29	0.057	0.051	0.027	<0.015

V=INSUFFICIENT VOLUME FOR ANY ANALYSIS

J.12 Analysis of Leachates from the Control (Media-Only) Field Cells

The chemical analytical data for the control field cells (Cells 7 and 12) include data for only one sample point. As was the case for the Exxon PFBC and Alliance AFBC field cells, the leachate analysis results are presented by element for the entire sampling period (by date and day reading down the page). The convention for the day (A) and day (O) entries is the same as for the PFBC cells (Section J.10).

PARAMETER= ALUMINUM

SAMPLE DATE	DAYS A	DAYS D	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	0.085	<0.06
06AUG79	2	2	0.13	<0.06
07AUG79	3	3	0.12	<0.06
08AUG79	4	4	<0.06	<0.06
11AUG79	7	7	0.12	<0.06
12AUG79	8	8	0.2	<0.06
14AUG79	10	10	0.13	0.083
16AUG79	12	12	0.089	<0.06
19AUG79	15	15	<0.06	<0.06
24AUG79	20	20	0.067	<0.06
28AUG79	24	24	0.33	0.12
02SEP79	29	29	0.48	0.18
09SEP79	36	36	0.4	*
20SEP79	47	47	0.11	<0.06
29SEP79	56	56	0.14	<0.06
14OCT79	71	71	0.21	0.21
01NOV79	89	89	0.15	<0.06
24NOV79	112	112	2.6	0.79
14DEC79	132	132	3.2	1.6
27JAN80	166	166	1.5	0.55
06MAR80	215	215	1.4	0.8
28APR80	268	268	1.3	0.3
29JUN80	330	330	2.8	0.43
11SEP80	404	404	2.3	0.1
26DEC80	510	510	1.8	0.18
18JUN81	684	549	3.7	1.2
17JUL81	713	578	3.1	0.63
17AUG81	744	609	4.2	1.1
17SEP81	776	640	1.5	1
19OCT81	807	672	1.8	1.4

PARAMETER= BARIUM

SAMPLE DATE	DAYS A	DAYS - 0	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	0.087	0.051
06AUG79	2	2	<0.001	0.034
07AUG79	3	3	<0.001	0.069
08AUG79	4	4	<0.001	0.041
11AUG79	7	7	<0.001	0.046
12AUG79	8	8	<0.001	0.049
14AUG79	10	10	<0.001	0.079
16AUG79	12	12	<0.001	0.086
19AUG79	15	15	0.0025	0.1
24AUG79	20	20	0.038	0.11
28AUG79	24	24	0.15	0.24
02SEP79	29	29	0.23	0.23
09SEP79	36	36	0.15	*
20SEP79	47	47	0.078	0.16
29SEP79	56	56	0.092	0.14
14OCT79	71	71	0.062	0.11
01NOV79	89	89	0.071	0.12
24NOV79	112	112	0.3	0.26
14DEC79	132	132	0.25	0.3
17JAN80	166	166	<.0006	0.011
06MAR80	215	215	<.0006	0.0071
28APR80	268	268	0.17	0.23
29JUN80	330	330	0.17	0.35
11SEP80	404	404	0.008	0.09
26DEC80	510	510	0.005	0.05
18JUN81	684	549	0.69	0.84
17JUL81	713	578	0.28	0.33
17AUG81	744	609	0.21	0.43
17SEP81	775	640	0.62	0.68
19OCT81	807	672	0.93	0.96

PARAMETER= BERYLLIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0		
06AUG79	2	2		
07AUG79	3	3		
08AUG79	4	4		
11AUG79	7	7		
12AUG79	8	8		
14AUG79	10	10		
16AUG79	12	12		
19AUG79	15	15		
24AUG79	20	20		
28AUG79	24	24		
02SEP79	29	29		
09SEP79	36	36		
20SEP79	47	47		
29SEP79	56	56		
14OCT79	71	71		
01NOV79	89	89		
24NOV79	112	112		
14DEC79	132	132		
17JAN80	166	166		
06MAR80	215	215		
28APR80	268	268		
29JUN80	330	330	<0.001	<0.001
11SEP80	404	404	0.007	<.0005
26DEC80	510	510	<0.001	<0.001
18JUN81	684	549	<0.002	<0.002
17JUL81	713	578	<0.002	<0.002
17AUG81	744	609	<0.002	<0.002
17SEP81	775	640	<0.002	<0.002
19OCT81	807	672	<0.002	<0.002

PARAMETER= BORON

SAMPLE DATE	DAYS A	DAYS D	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	0.094	0.046
06AUG79	2	2	<0.004	<0.004
07AUG79	3	3	<0.004	<0.004
08AUG79	4	4	<0.004	<0.004
11AUG79	7	7	<0.004	<0.004
12AUG79	8	8	<0.004	<0.004
14AUG79	10	10	0.16	0.11
16AUG79	12	12	0.1	0.1
19AUG79	15	15	0.099	0.096
24AUG79	20	20	0.14	0.11
28AUG79	24	24	0.18	0.13
02SEP79	29	29	0.44	0.13
09SEP79	36	36	0.18	.
20SEP79	47	47	0.063	0.036
29SEP79	56	56	0.1	0.042
14OCT79	71	71	0.15	<0.004
01NOV79	89	89	0.02	<0.004
24NOV79	112	112	1.3	0.52
14DEC79	132	132	1.1	0.69
17JAN80	166	166	<0.012	<0.012
06MAR80	215	215	0.4	0.38
28APR80	268	268	1.1	<0.009
29JUN80	330	330	3.5	0.39
11SEP80	404	404	3.6	<0.012
26DEC80	510	510	<0.009	<0.009
18JUN81	684	549	1.9	1.8
17JUL81	713	578	0.4	<0.045
17AUG81	744	609	1.4	0.093
17SEP81	775	640	7.2	2.5
19OCT81	807	672	2.8	2.7

PARAMETER= CADMIUM

SAMPLE DATE	DAYS A	DAYS - 0	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	<0.005	<0.005
06AUG79	2	2	<0.005	<0.005
07AUG79	3	3	<0.005	<0.005
08AUG79	4	4	<0.005	<0.005
11AUG79	7	7	<0.005	0.0054
12AUG79	8	8	<0.005	0.0074
14AUG79	10	10	<0.005	<0.005
16AUG79	12	12	<0.005	<0.005
19AUG79	15	15	<0.005	0.0056
24AUG79	20	20	<0.005	<0.005
28AUG79	24	24	<0.005	<0.005
02SEP79	29	29	<0.005	<0.005
09SEP79	36	36	<0.005	-
20SEP79	47	47	<0.005	<0.005
29SEP79	56	56	<0.005	<0.005
14OCT79	71	71	<0.005	<0.005
01NOV79	89	89	<0.005	<0.005
24NOV79	112	112	0.13	0.11
14DEC79	132	132	0.24	0.22
17JAN80	166	166	0.043	0.048
06MAR80	215	215	<0.008	<0.008
28APR80	268	268	<0.008	<0.008
29JUN80	330	330	<0.025	<0.025
11SEP80	404	404	0.04	<0.008
26DEC80	510	510	<0.008	<0.008
18JUN81	684	549	<0.04	<0.04
17JUL81	713	578	<0.042	<0.042
17AUG81	744	609	<0.042	<0.042
17SEP81	775	640	<0.042	<0.042
19OCT81	807	672	<0.01	<0.01

PARAMETER= CALCIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	600	53
06AUG79	2	2	630	27
07AUG79	3	3	640	19
08AUG79	4	4	630	27
11AUG79	7	7	670	130
12AUG79	8	8	680	53
14AUG79	10	10	670	21
16AUG79	12	12	660	34
19AUG79	15	15	670	23
24AUG79	20	20	660	23
28AUG79	24	24	790	28
02SEP79	29	29	800	100
09SEP79	36	36	820	.
20SEP79	47	47	780	47
29SEP79	56	56	790	40
14OCT79	71	71	790	24
01NOV79	89	89	770	22
24NOV79	112	112	2700	74
14DEC79	132	132	3300	590
17JAN80	166	166	2080	47
06MAR80	215	215	630	41
28APR80	268	268	640	13
29JUN80	330	330	740	47
11SEP80	404	404	670	50
26DEC80	510	510	580	30
18JUN81	684	549	640	9.3
17JUL81	713	578	590	18
17AUG81	744	609	620	16
17SEP81	776	640	610	190
19OCT81	807	672	700	14

PARAMETER> CHLORIDES

SAMPLE DATE	DAYS A - O		CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	•	E
06AUG79	2	2	•	•
07AUG79	3	3	•	•
08AUG79	4	4	•	E
11AUG79	7	7	•	•
12AUG79	8	8	•	•
14AUG79	10	10	•	•
16AUG79	12	12	•	•
19AUG79	15	15	•	•
24AUG79	20	20	•	•
28AUG79	24	24	•	•
02SEP79	29	29	•	•
09SEP79	36	36	•	•
20SEP79	47	47	•	•
29SEP79	56	56	•	•
14OCT79	71	71	•	•
01NOV79	89	89	•	•
24NOV79	112	112	•	•
14DEC79	132	132	•	•
17JAN80	166	166	•	•
06MAR80	215	215	•	•
28APR80	268	268	<2	•
29JUN80	330	330	2.6	•
11SEP80	404	404	<2	<2
26DEC80	510	510	<2	<2
18JUN81	684	549	<2	<2
17JUL81	713	578	<2	<2
17AUG81	744	609	3.3	<2
17SEP81	775	640	<2	<2
19OCT81	807	672	<2	<2

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= CHROMIUM

SAMPLE DATE	DAYS A	DAYS O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	0.04	<0.005
06AUG79	2	2	0.058	<0.005
07AUG79	3	3	0.056	<0.005
08AUG79	4	4	0.048	<0.005
11AUG79	7	7	0.06	0.011
12AUG79	8	8	0.068	<0.005
14AUG79	10	10	0.054	<0.005
16AUG79	12	12	0.053	<0.005
19AUG79	15	15	0.054	<0.005
24AUG79	20	20	0.052	<0.005
28AUG79	24	24	0.077	<0.005
02SEP79	29	29	0.083	0.011
09SEP79	36	36	0.086	.
20SEP79	47	47	0.059	<0.005
29SEP79	56	56	0.063	<0.005
14OCT79	71	71	0.081	<0.005
01NOV79	89	89	0.07	<0.005
24NOV79	112	112	0.49	0.3
14DEC79	132	132	0.71	0.55
17JAN80	166	166	0.14	0.11
06MAR80	215	215	0.074	0.1
28APR80	268	268	0.017	<0.001
29JUN80	330	330	0.08	<0.003
11SEP80	404	404	0.13	<0.007
26DEC80	510	510	0.029	0.014
18JUN81	684	549	0.15	0.12
17JUL81	713	578	0.029	<0.005
17AUG81	744	609	0.25	0.025
17SEP81	775	640	<0.005	<0.005
19OCT81	807	672	0.007	0.012

PARAMETER= COBALT

SAMPLE DATE	DAYS A	DAYS D	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	0.16	<0.15
06AUG79	2	2	0.37	<0.15
07AUG79	3	3	0.33	<0.15
08AUG79	4	4	0.22	<0.15
11AUG79	7	7	0.36	<0.15
12AUG79	8	8	0.47	<0.15
14AUG79	10	10	<0.15	<0.15
16AUG79	12	12	<0.15	<0.15
19AUG79	15	15	<0.15	<0.15
24AUG79	20	20	<0.15	<0.15
28AUG79	24	24	0.38	<0.15
02SEP79	29	29	0.44	<0.15
09SEP79	36	36	0.4	.
20SEP79	47	47	<0.15	<0.15
29SEP79	56	56	<0.15	<0.15
140CT79	71	71	0.18	<0.15
01NOV79	89	89	<0.15	<0.15
24NOV79	112	112	0.21	0.16
14DEC79	132	132	0.39	0.37
17JAN80	166	166	0.052	0.061
06MAR80	215	215	0.032	0.067
28APR80	268	268	<0.006	<0.006
29JUN80	330	330	0.048	<0.018
11SEP80	404	404	0.08	<0.011
26DEC80	510	510	<0.006	<0.006
18JUN81	684	549	<0.03	<0.03
17JUL81	713	578	<0.03	<0.03
17AUG81	746	609	0.032	0.037
17SEP81	775	640	<0.03	<0.03
190CT81	807	672	<0.03	<0.03

PARAMETER= CONDUCTIVITY

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	2800	E
06AUG79	2	2	3000	260
07AUG79	3	3	3400	270
08AUG79	4	4	3400	E
11AUG79	7	7	3400	930
12AUG79	8	8	3100	460
14AUG79	10	10	3200	220
16AUG79	12	12	3200	290
19AUG79	15	15	3300	210
24AUG79	20	20	3400	250
28AUG79	24	24	3500	210
02SEP79	29	29	3400	600
09SEP79	36	36	3500	340
20SEP79	47	47	3700	360
29SEP79	56	56	3800	320
140CT79	71	71	3600	200
01NOV79	89	89	3600	200
24NOV79	113	112	3300	230
14DEC79	132	132	6200	940
17JAN80	166	166	3100	260
06MAR80	215	215	3000	480
28APR80	268	268	3080	130
29JUN80	330	330	3000	300
11SEP80	404	404	3080	360
26DEC80	510	510	2900	250
18JUN81	684	549	3000	100
17JUL81	713	578	3300	170
17AUG81	744	609	3200	140
17SEP81	775	640	3400	1000
190CT81	807	672	3300	110

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= COPPER

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	<0.005	<0.005
06AUG79	2	2	0.0087	<0.005
07AUG79	3	3	0.0074	<0.005
08AUG79	4	4	<0.005	<0.005
11AUG79	7	7	0.0065	<0.005
12AUG79	8	8	0.012	0.0058
14AUG79	10	10	<0.005	<0.005
16AUG79	12	12	<0.005	<0.005
19AUG79	15	15	<0.005	<0.005
24AUG79	20	20	<0.005	<0.005
28AUG79	24	24	0.0077	<0.005
02SEP79	29	29	0.0098	<0.005
09SEP79	36	36	0.0068	.
20SEP79	47	47	<0.005	<0.005
29SEP79	56	56	<0.005	<0.005
14OCT79	71	71	0.005	0.0054
01NOV79	89	89	<0.005	<0.005
24NOV79	112	112	0.04	0.031
14DEC79	132	132	0.055	0.046
17JAN80	166	166	0.038	0.043
06MAR80	215	215	0.049	0.088
28APR80	268	268	<0.001	<0.001
29JUN80	330	330	0.095	<0.003
11SEP80	404	404	0.13	<0.001
26DEC80	510	510	0.03	0.044
18JUN81	684	549	0.91	0.033
17JUL81	713	578	<0.005	<0.005
17AUG81	744	609	0.16	0.1
17SEP81	775	640	<0.005	<0.005
19OCT81	807	672	<0.005	<0.005

PARAMETER= FLUORIDES

SAMPLE DATE	DAYS A	DAYS - 0	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	0.22	E
06AUG79	2	2	0.2	<0.05
07AUG79	3	3	0.15	0.15
08AUG79	4	4	0.13	E
11AUG79	7	7	0.16	0.14
12AUG79	8	8	0.17	0.13
14AUG79	10	10	0.19	0.14
16AUG79	12	12	0.2	0.15
19AUG79	15	15	0.2	0.1
24AUG79	20	20	0.17	0.11
28AUG79	24	24	0.13	0.14
02SEP79	29	29	0.11	0.11
09SEP79	36	36	0.17	0.13
20SEP79	47	47	0.11	0.14
29SEP79	56	56	0.06	0.12
14OCT79	71	71	0.23	0.13
01NOV79	89	89	0.24	0.3
24NOV79	112	112	0.15	0.14
14DEC79	132	132	0.21	0.11
17JAN80	166	166	0.14	0.09
06MAR80	215	215	0.16	0.1
28APR80	268	268	0.23	0.12
29JUN80	330	330	0.16	0.06
11SEP80	404	404	0.28	0.1
26DEC80	510	510	0.25	0.14
18JUN81	684	549	0.17	0.06
17JUL81	713	578	0.11	0.06
17AUG81	744	609	0.1	0.1
17SEP81	775	640	0.2	0.16
19OCT81	807	672	0.21	0.08

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER> IRON

SAMPLE DATE	DAYS A	DAYS 0	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	0.027	0.086
06AUG79	2	2	0.057	0.094
07AUG79	3	3	0.055	0.15
08AUG79	4	4	0.028	0.13
11AUG79	7	7	0.024	0.12
12AUG79	8	8	0.048	0.1
14AUG79	10	10	0.026	0.11
16AUG79	12	12	0.023	0.1
19AUG79	15	15	0.028	0.085
24AUG79	20	20	0.033	0.05
28AUG79	24	24	0.026	0.017
02SEP79	29	29	0.032	0.013
09SEP79	36	36	0.025	*
20SEP79	47	47	0.023	0.0066
29SEP79	56	56	0.024	<0.004
140CT79	71	71	0.089	0.044
01NOV79	89	89	0.033	0.0096
24NOV79	112	112	0.12	0.066
14DEC79	132	132	0.23	0.2
17JAN80	166	166	0.015	0.014
06MAR80	215	215	0.039	0.051
28APR80	268	268	0.009	<0.008
29JUN80	330	330	<0.023	<0.023
11SEP80	404	404	0.07	<0.008
26DEC80	510	510	<0.008	<0.008
18JUN81	684	549	0.16	<0.04
17JUL81	713	578	0.045	<0.038
17AUG81	744	609	0.14	<0.038
17SEP81	775	640	<0.038	<0.038
190CT81	807	672	<0.04	0.044

PARAMETER= LITHIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	.	.
06AUG79	2	2	.	.
07AUG79	3	3	.	.
08AUG79	4	4	.	.
11AUG79	7	7	.	.
12AUG79	8	8	.	.
14AUG79	10	10	.	.
16AUG79	12	12	.	.
19AUG79	15	15	.	.
24AUG79	20	20	.	.
28AUG79	24	24	.	.
02SEP79	29	29	.	.
09SEP79	36	36	.	.
20SEP79	47	47	.	0.01
29SEP79	56	56	.	.
14OCT79	71	71	.	.
01NOV79	89	89	.	.
24NOV79	112	112	.	.
14DEC79	132	132	.	.
17JAN80	166	166	.	.
06MAR80	215	215	.	.
28APR80	268	268	.	.
29JUN80	330	330	.	.
11SEP80	404	404	0.067	<0.001
26DEC80	510	510	0.11	0.002
18JUN81	684	549	<0.001	<0.001
17JUL81	713	578	<0.002	<0.002
17AUG81	744	609	<0.002	<0.002
17SEP81	775	640	0.082	0.053
19OCT81	807	672	<0.002	<0.002
			<0.002	<0.002

PARAMETER= MAGNESIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	110	8.1
06AUG79	2	2	120	5.3
07AUG79	3	3	130	4
08AUG79	4	4	130	5.3
11AUG79	7	7	130	28
12AUG79	8	8	130	11
14AUG79	10	10	110	4.1
16AUG79	12	12	110	6.7
19AUG79	15	15	110	4.3
24AUG79	20	20	110	4.3
28AUG79	24	24	18	0.47
02SEP79	29	29	18	2
09SEP79	36	36	19	.
20SEP79	47	47	190	9.6
29SEP79	56	56	190	8.3
140CT79	71	71	200	4.3
01NOV79	89	89	200	6.2
24NOV79	112	112	190	6.1
14DEC79	132	132	180	33
17JAN80	166	166	210	8.6
06MAR80	215	215	190	10
28APR80	268	268	0.028	0.11
29JUN80	330	330	210	12
11SEP80	404	404	200	11
26DEC80	510	510	240	6.2
18JUN81	684	549	280	2.4
17JUL81	713	578	270	4
17AUG81	744	609	300	3.4
17SEP81	775	640	250	86
190CT81	807	672	310	3

PARAMETER= MANGANESE

SAMPLE DATE	DAYS A	DAYS - 0	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	1.6	1.1
06AUG79	2	2	0.56	0.64
07AUG79	3	3	0.63	0.57
08AUG79	4	4	0.62	0.62
11AUG79	7	7	0.61	0.72
12AUG79	8	8	0.41	0.74
14AUG79	10	10	0.37	0.68
16AUG79	12	12	0.42	0.76
19AUG79	15	15	0.46	0.86
24AUG79	20	20	0.35	0.92
28AUG79	24	24	0.29	1.1
02SEP79	29	29	0.3	1
09SEP79	36	36	0.33	.
20SEP79	47	47	0.31	1
29SEP79	56	56	0.17	0.83
140CT79	71	71	0.16	0.66
01NOV79	89	89	0.18	0.67
24NOV79	112	112	0.32	1.2
14DEC79	132	132	0.33	1.1
17JAN80	166	166	0.0055	0.32
06MAR80	215	215	0.033	0.13
28APR80	268	268	0.011	<0.002
29JUN80	330	330	0.04	0.29
11SEP80	404	404	0.05	0.39
26DEC80	510	510	0.009	0.23
18JUN81	684	549	<0.006	0.041
17JUL81	713	578	<0.006	0.098
17AUG81	744	609	<0.006	0.14
17SEP81	775	640	0.006	0.18
190CT81	807	672	<0.006	0.21

PARAMETER= MERCURY

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	<0.001	<0.001
06AUG79	2	2	<0.001	<0.001
07AUG79	3	3	<0.001	<0.001
08AUG79	4	4	<0.001	<0.001
11AUG79	7	7	<0.001	<0.001
12AUG79	8	8	<0.001	<0.001
14AUG79	10	10	<0.001	<0.001
16AUG79	12	12	<0.001	<0.001
19AUG79	15	15	<0.001	<0.001
24AUG79	20	20	<0.001	<0.001
28AUG79	24	24	D	D
02SEP79	29	29	D	D
09SEP79	36	36	D	D
20SEP79	47	47	D	D
29SEP79	56	56	D	D
14OCT79	71	71	D	D
01NOV79	89	89	D	D
24NOV79	112	112	D	D
14DEC79	132	132	D	D
17JAN80	166	166	D	D
06MAR80	215	215	D	D
28APR80	268	268	D	D
29JUN80	330	330	D	D
11SEP80	404	404	D	D
26DEC80	510	510	D	D
18JUN81	684	549	D	D
17JUL81	713	578	D	D
17AUG81	746	609	D	D
17SEP81	775	640	D	D
19OCT81	807	672	D	D

D=DISCONTINUED AFTER DL REACHED

PARAMETER= MOLYBDENUM

SAMPLE DATE	DAYS A	DAYS - 0	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	0.076	<0.04
06AUG79	2	2	0.22	<0.04
07AUG79	3	3	0.21	<0.04
08AUG79	4	4	0.12	<0.04
11AUG79	7	7	0.21	<0.04
12AUG79	8	8	0.29	<0.04
14AUG79	10	10	0.067	<0.04
16AUG79	12	12	0.054	<0.04
19AUG79	15	15	0.061	<0.04
24AUG79	20	20	0.063	<0.04
28AUG79	24	24	0.3	<0.04
02SEP79	29	29	0.32	<0.04
09SEP79	36	36	0.3	.
20SEP79	47	47	0.099	<0.04
29SEP79	56	56	0.11	<0.04
140CT79	71	71	0.14	<0.04
01NOV79	89	89	0.059	<0.04
24NOV79	112	112	0.23	0.15
14DEC79	132	132	0.49	0.44
17JAN80	165	166	0.052	0.043
06MAR80	215	215	0.045	0.063
28APR80	268	268	0.087	0.004
29JUN80	330	330	0.077	0.011
11SEP80	404	404	0.09	<0.009
26DEC80	510	510	<0.002	<0.002
18JUN81	684	549	<0.01	<0.01
17JUL81	713	578	<0.01	<0.01
17AUG81	744	609	0.099	0.017
17SEP81	775	640	<0.01	0.012
190CT81	807	672	<0.01	<0.01

PARAMETER= NICKEL

SAMPLE DATE	DAYS A	DAYS O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	0.12	0.035
06AUG79	2	2	0.15	<0.02
07AUG79	3	3	0.12	<0.02
08AUG79	4	4	0.12	<0.02
11AUG79	7	7	0.15	0.06
12AUG79	8	8	0.18	0.066
14AUG79	10	10	0.12	<0.02
16AUG79	12	12	0.12	0.041
19AUG79	15	15	0.14	0.031
24AUG79	20	20	0.11	<0.02
28AUG79	24	24	0.12	<0.02
02SEP79	29	29	0.13	0.034
09SEP79	36	36	0.12	.
20SEP79	47	47	0.14	0.049
29SEP79	56	56	0.15	0.042
140CT79	71	71	0.14	<0.02
01NOV79	89	89	0.12	<0.02
24NOV79	113	112	0.39	0.35
14DEC79	132	132	0.73	0.72
17JAN80	165	166	0.12	0.13
06MAR80	215	215	<0.017	<0.017
28APR80	268	268	.	.
29JUN80	330	330	0.12	0.023
11SEP80	404	404	0.1	0.02
26DEC80	510	510	0.032	0.042
18JUN81	684	549	0.11	0.095
17JUL81	713	578	<0.015	<0.015
17AUG81	744	609	0.094	0.066
17SEP81	775	640	<0.015	0.023
19OCT81	807	672	<0.015	<0.015

PARAMETER= PH

SAMPLE DATE	DAYS A	DAYS - 0	CELL 7 (SWALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	7.5	E
06AUG79	2	2	7.6	7.2
07AUG79	3	3	7.4	6.7
08AUG79	4	4	7.3	E
11AUG79	7	7	7.5	7.3
12AUG79	8	8	7.4	7.8
14AUG79	10	10	7.5	7.8
16AUG79	12	12	7.4	6.8
19AUG79	15	15	7.4	7.7
24AUG79	20	20	7.1	6.6
28AUG79	24	24	7.1	6.6
02SEP79	29	29	7.5	6.6
09SEP79	36	36	7.3	6.8
20SEP79	47	47	7.2	6.9
29SEP79	56	56	6.9	6.4
14OCT79	71	71	7	6.4
01NOV79	89	89	7.4	6.5
24NOV79	112	112	6.9	6.4
14DEC79	132	132	7	7.2
17JAN80	166	166	6.9	6.2
06MAR80	215	215	7.3	6.6
28APR80	268	268	7.3	6.3
29JUN80	330	330	7.6	6.2
11SEP80	404	404	7.1	5.7
26DEC80	510	510	7.5	6.7
18JUN81	684	549	7.5	6.1
17JUL81	713	578	7.3	6.7
17AUG81	744	609	7.5	6.4
17SEP81	775	640	7.2	7.1
19OCT81	807	672	7.3	5.7

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER> POTASSIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	210	42
06AUG79	2	2	150	<40
07AUG79	3	3	160	48
08AUG79	4	4	190	65
11AUG79	7	7	150	130
12AUG79	8	8	81	88
14AUG79	10	10	210	<40
16AUG79	12	12	210	<40
19AUG79	15	15	210	<40
24AUG79	20	20	210	<40
28AUG79	24	24	290	<40
02SEP79	29	29	310	50
09SEP79	36	36	310	.
20SEP79	47	47	200	<40
29SEP79	56	56	210	<40
140CT79	71	71	230	<40
01NOV79	89	89	200	<40
24NOV79	112	112	13	1.2
14DEC79	132	132	11	2.7
17JAN80	166	166	24	2.3
06MAR80	215	215	28	3.9
28APR80	268	268	44	1.1
29JUN80	330	330	58	4.1
11SEP80	404	404	41	2.7
26DEC80	510	510	40	1.5
18JUN81	684	549	50	1.6
17JUL81	713	578	55	1
17AUG81	744	609	67	1.8
17SEP81	775	640	62	20
19OCT81	807	672	58	2.3

PARAMETER= SELENIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	<0.005	<0.005
06AUG79	2	2	<0.005	<0.005
07AUG79	3	3	<0.005	<0.005
08AUG79	4	4	<0.005	<0.005
11AUG79	7	7	<0.005	<0.005
12AUG79	8	8	<0.005	<0.005
14AUG79	10	10	<0.005	<0.005
16AUG79	12	12	<0.005	<0.005
19AUG79	15	15	<0.005	<0.005
24AUG79	20	20	<0.005	<0.005
28AUG79	24	24	<0.005	<0.005
02SEP79	29	29	D	D
09SEP79	36	36	D	D
20SEP79	47	47	D	D
29SEP79	56	56	D	D
14OCT79	71	71	D	D
01NOV79	89	89	D	D
24NOV79	112	112	D	D
14DEC79	132	132	D	D
17JAN80	166	166	D	D
06MAR80	215	215	D	D
28APR80	268	268	D	D
29JUN80	330	330	D	D
11SEP80	404	404	D	D
26DEC80	510	510	D	D
18JUN81	684	549	D	D
17JUL81	713	578	D	D
17AUG81	744	609	D	D
17SEP81	775	640	D	D
19OCT81	807	672	D	D

D=DISCONTINUED AFTER DL REACHED

PARAMETER= SILICON

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	29	20
06AUG79	2	2	9.4	10
07AUG79	3	3	14	10
08AUG79	4	4	17	12
11AUG79	7	7	17	15
12AUG79	8	8	10	14
14AUG79	10	10	12	12
16AUG79	12	12	15	13
19AUG79	15	15	19	15
24AUG79	20	20	19	17
28AUG79	24	24	16	16
02SEP79	29	29	17	16
09SEP79	36	36	19	.
20SEP79	47	47	46	36
29SEP79	56	56	31	31
14OCT79	71	71	21	25
01NOV79	89	89	31	26
24NOV79	112	112	42	31
14DEC79	132	132	33	33
17JAN80	166	166	8.1	10
06MAR80	215	215	6.3	5
28APR80	268	268	6.4	6.2
29JUN80	330	330	9.9	8.5
11SEP80	404	404	13	12
26DEC80	510	510	7.7	7
18JUN81	684	549	5.4	6.2
17JUL81	713	578	7.9	6.7
17AUG81	746	609	12	8.6
17SEP81	775	640	8.6	10
19OCT81	807	672	10	8.1

PARAMETER: SILVER

SAMPLE DATE	DAYS A	DAYS - 0	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	0.012	<0.005
06AUG79	2	2	0.036	<0.005
07AUG79	3	3	0.022	0.0055
08AUG79	4	4	0.014	0.0053
11AUG79	7	7	0.024	<0.005
12AUG79	8	8	0.033	0.006
14AUG79	10	10	0.012	<0.005
16AUG79	12	12	0.006	<0.005
19AUG79	15	15	0.006	<0.005
24AUG79	20	20	0.02	<0.005
28AUG79	24	24	0.057	<0.005
02SEP79	29	29	0.068	<0.005
09SEP79	36	36	0.062	.
20SEP79	47	47	<0.005	<0.005
29SEP79	56	56	<0.005	<0.005
140CT79	71	71	0.023	0.018
01NOV79	89	89	0.013	<0.005
24NOV79	112	112	0.21	0.14
14DEC79	132	132	0.26	0.21
27JAN80	166	166	0.098	0.11
06MAR80	215	215	0.07	0.13
28APR80	268	268	<0.002	<0.002
29JUN80	330	330	<0.006	<0.006
11SEP80	404	404	0.18	<0.002
26DEC80	510	510	<0.002	<0.002
18JUN81	684	549	<0.005	<0.005
17JUL81	713	578	<0.01	<0.01
17AUG81	744	609	<0.01	<0.01
17SEP81	775	640	<0.01	<0.01
190CT81	807	672	<0.01	<0.01

PARAMETER> SODIUM

SAMPLE DATE	DAYS A	- O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	<5	<5
06AUG79	2	2	<5	<5
07AUG79	3	3	<5	<5
08AUG79	4	4	<5	<5
11AUG79	7	7	<5	<5
12AUG79	8	8	<5	<5
14AUG79	10	10	<5	<5
16AUG79	12	12	<5	<5
19AUG79	15	15	<5	<5
24AUG79	20	20	<5	<5
28AUG79	24	24	<5	<5
02SEP79	29	29	<5	<5
09SEP79	36	36	<5	.
20SEP79	47	47	<5	<5
29SEP79	56	56	<5	<5
14OCT79	71	71	<5	<5
01NOV79	89	89	<5	<5
24NOV79	112	112	1.8	1.3
14DEC79	132	132	<.0856	<.0856
17JAN80	165	166	6.9	3.5
06MAR80	215	215	6.6	2.6
28APR80	268	268	7.5	3.7
29JUN80	330	330	9.7	5
11SEP80	404	404	7.7	6
26DEC80	510	510	7.1	4.3
18JUN81	684	549	8	3.9
17JUL81	713	578	7.8	3
17AUG81	744	609	7.5	3.3
17SEP81	775	640	5.9	4.2
19OCT81	807	672	10	5.4

PARAMETER= STRONTIUM

SAMPLE DATE	DAYS A	DAYS 0	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	2.1	0.69
06AUG79	2	2	1.4	0.17
07AUG79	3	3	1.4	0.13
08AUG79	4	4	1.5	0.15
11AUG79	7	7	1.5	0.41
12AUG79	8	8	1.5	0.22
14AUG79	10	10	1.6	0.13
16AUG79	12	12	1.7	0.17
19AUG79	15	15	1.7	0.15
24AUG79	20	20	1.7	0.15
28AUG79	24	24	2	0.18
02SEP79	29	29	2	0.35
09SEP79	36	36	2.1	.
20SEP79	47	47	1.9	0.2
29SEP79	56	56	2	0.17
140CT79	71	71	2.3	0.33
01NOV79	89	89	2.2	0.17
24NOV79	112	112	3.1	0.22
14DEC79	132	132	3.1	0.75
17JAN80	166	166	1.7	0.14
06MAR80	215	215	1.4	0.11
28APR80	268	268	1.4	0.078
29JUN80	330	330	1.3	0.15
11SEP80	404	404	1.2	0.22
26DEC80	510	510	1.3	0.13
18JUN81	684	549	1.6	0.066
17JUL81	713	578	1.4	0.068
17AUG81	744	609	1.5	0.094
17SEP81	775	640	1.4	0.44
190CT81	807	672	1.6	0.08

PARAMETER= SULPHATES

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	1400	E
06AUG79	2	2	1600	35
07AUG79	3	3	1700	27
08AUG79	4	4	1700	E
11AUG79	7	7	1700	360
12AUG79	8	8	1800	140
14AUG79	10	10	1800	30
16AUG79	12	12	1800	65
19AUG79	15	15	1800	33
24AUG79	20	20	1600	30
28AUG79	24	24	1800	32
02SEP79	29	29	1900	200
09SEP79	36	36	2000	120
20SEP79	47	47	2200	110
29SEP79	56	56	2200	100
140CT79	71	71	2300	41
01NOV79	89	89	2000	30
24NOV79	112	112	2300	55
14DEC79	132	132	2100	390
17JAN80	166	166	1900	71
06MAR80	215	215	1900	170
28APR80	268	268	1900	36
29JUN80	330	330	2100	110
11SEP80	404	404	1900	100
26DEC80	510	510	2200	80
18JUN81	684	549	2100	29
17JUL81	713	578	2100	48
17AUG81	744	609	2200	44
17SEP81	775	640	2100	660
190CT81	807	672	2100	43

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= TITANIUM

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	0.019	<0.002
06AUG79	2	2	0.026	<0.002
07AUG79	3	3	0.024	0.0091
08AUG79	4	4	0.019	0.0027
11AUG79	7	7	0.021	0.0041
12AUG79	8	8	0.026	0.0035
14AUG79	10	10	0.013	<0.002
16AUG79	12	12	0.013	<0.002
19AUG79	15	15	0.016	<0.002
24AUG79	20	20	0.015	<0.002
28AUG79	24	24	0.028	<0.002
02SEP79	29	29	0.029	<0.002
09SEP79	36	36	0.028	.
20SEP79	47	47	0.034	<0.002
29SEP79	56	56	0.033	<0.002
14OCT79	71	71	0.011	<0.002
01NOV79	89	89	0.036	<0.002
24NOV79	112	112	0.77	0.51
14DEC79	132	132	0.99	0.8
17JAN80	166	166	0.17	0.19
06MAR80	215	215	0.13	0.26
28APR80	268	268	<0.005	<0.005
29JUN80	330	330	0.2	<0.015
11SEP80	404	404	0.3	<0.008
26DEC80	510	510	<0.005	<0.005
18JUN81	684	549	<0.025	<0.025
17JUL81	713	578	<0.025	<0.025
17AUG81	744	609	0.23	0.09
17SEP81	775	640	<0.025	<0.025
19OCT81	807	672	<0.025	<0.025

PARAMETER= TOTAL DISSOLVED SOLIDS

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SWALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	3200	E
06AUG79	2	2	3600	280
07AUG79	3	3	3600	220
08AUG79	4	4	3500	E
11AUG79	7	7	3300	740
12AUG79	8	8	3600	270
14AUG79	10	10	3800	200
16AUG79	12	12	3600	170
19AUG79	15	15	3600	120
24AUG79	20	20	3500	140
28AUG79	24	24	3700	140
02SEP79	29	29	3600	480
09SEP79	36	36	3800	210
20SEP79	47	47	3900	240
29SEP79	56	56	4400	220
14OCT79	71	71	4200	200
01NOV79	89	89	3700	160
24NOV79	112	112	3900	140
14DEC79	132	132	3800	780
17JAN80	166	166	3500	130
06MAR80	215	215	3500	450
28APR80	268	268	3300	400
29JUN80	330	330	3600	410
11SEP80	404	404	3500	150
26DEC80	510	510	3600	160
18JUN81	684	549	3600	130
17JUL81	713	578	3400	90
17AUG81	746	609	3700	150
17SEP81	775	640	4100	1300
19OCT81	807	672	3700	100

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= TOTAL INORGANIC CARBON

SAMPLE DATE	DAYS A	DAYS - 0	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	•	E
06AUG79	2	2	•	•
07AUG79	3	3	•	•
08AUG79	4	4	•	E
11AUG79	7	7	•	•
12AUG79	8	8	•	•
14AUG79	10	10	•	•
16AUG79	12	12	•	•
19AUG79	15	15	•	•
24AUG79	20	20	•	•
28AUG79	24	24	•	•
02SEP79	29	29	•	•
09SEP79	36	36	•	•
20SEP79	47	47	•	•
29SEP79	56	56	•	•
14OCT79	71	71	•	•
01NOV79	89	89	•	•
24NOV79	112	112	•	•
14DEC79	132	132	•	•
17JAN80	166	166	•	•
06MAR80	215	215	•	•
28APR80	268	268	•	•
29JUN80	330	330	•	•
11SEP80	404	404	•	•
26DEC80	510	510	•	•
18JUN81	684	549	60	14
17JUL81	713	578	79	<2
17AUG81	744	609	•	•
17SEP81	775	640	•	•
19OCT81	807	672	71	23
			•	•

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= TODAL ORGANIC CARBON

SAMPLE DATE	DAYS A	DAYS - O	CELL 7 (SMALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	39	E
06AUG79	2	2	7.5	3.5
07AUG79	3	3	8.5	4.5
08AUG79	4	4	.	E
11AUG79	7	7	8.7	6.9
12AUG79	8	8	5.5	5.2
14AUG79	10	10	6	3.6
16AUG79	12	12	6.4	5.8
19AUG79	15	15	8.7	7.5
24AUG79	20	20	8	9.3
28AUG79	24	24	6	7.6
02SEP79	29	29	7.4	7.3
09SEP79	36	36	6.7	8.4
20SEP79	47	47	13	17
29SEP79	56	56	9.4	12
14OCT79	71	71	6.6	9
01NOV79	89	89	9.7	10
24NOV79	112	112	8.9	7.7
14DEC79	132	132	.	.
17JAN80	166	166	.	.
06MAR80	215	215	4.1	4.8
28APR80	268	268	.	.
29JUN80	330	330	.	.
11SEP80	404	404	.	.
26DEC80	510	510	15	4.3
18JUN81	684	549	.	.
17JUL81	713	578	.	.
17AUG81	746	609	.	.
17SEP81	775	640	.	.
19OCT81	807	672	.	.

E=SUFFICIENT VOLUME TO RUN ELEMENTAL ANALYSES-AA AND ICP

PARAMETER= VANADIUM

SAMPLE DATE	DAYS A	DAYS O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0		
06AUG79	2	2	0.21	0.14
07AUG79	3	3	0.25	0.017
08AUG79	4	4	0.25	<0.01
11AUG79	7	7	0.24	0.015
12AUG79	8	8	0.26	0.065
14AUG79	10	10	0.28	0.029
16AUG79	12	12	0.26	0.016
19AUG79	15	15	0.26	0.015
24AUG79	20	20	0.26	<0.01
28AUG79	24	24	0.26	<0.01
02SEP79	29	29	0.35	<0.01
09SEP79	36	36	0.36	0.048
20SEP79	47	47	0.37	.
29SEP79	56	56	0.69	0.051
14OCT79	71	71	0.7	0.026
01NOV79	89	89	0.81	0.024
24NOV79	112	112	0.79	<0.01
14DEC79	132	132	0.43	<0.019
17JAN80	166	166	0.46	0.078
06MAR80	215	215	0.15	0.11
28APR80	268	268	0.13	0.17
29JUN80	330	330	0.016	<0.003
11SEP80	404	404	0.2	<0.009
26DEC80	510	510	0.3	<0.019
18JUN81	684	549	<0.003	<0.003
17JUL81	713	578	<0.015	<0.015
17AUG81	746	609	<0.015	<0.015
17SEP81	775	640	0.4	0.14
19OCT81	807	672	<0.015	<0.015
			<0.015	0.026

PARAMETER= ZINC

SAMPLE DATE	DAYS A	DAYS O	CELL 7 (SHALE)	CELL 12 (ALLUVIUM)
04AUG79	0	0	0.12	0.26
06AUG79	2	2	0.034	0.04
07AUG79	3	3	0.046	0.045
08AUG79	4	4	0.04	0.064
11AUG79	7	7	0.078	0.068
12AUG79	8	8	0.045	0.045
14AUG79	10	10	0.0025	0.026
16AUG79	12	12	0.032	0.027
19AUG79	15	15	0.04	0.033
24AUG79	20	20	0.11	0.03
28AUG79	24	24	0.073	0.072
02SEP79	29	29	0.095	0.071
09SEP79	36	36	0.095	.
20SEP79	47	47	0.092	0.061
29SEP79	56	56	0.075	0.043
14OCT79	71	71	0.11	0.054
01NOV79	89	89	0.14	0.077
24NOV79	112	112	1	0.46
14DEC79	132	132	1.5	1
17JAN80	166	166	0.28	0.13
06MAR80	215	215	<0.013	<0.013
28APR80	268	268	0.098	0.033
29JUN80	330	330	0.12	0.054
11SEP80	404	404	0.21	0.06
26DEC80	510	510	0.22	0.045
18JUN81	684	549	0.27	0.13
17JUL81	713	578	0.17	<0.015
17AUG81	744	609	0.14	0.023
17SEP81	775	640	0.23	0.17
19OCT81	807	672	0.081	<0.015